U.S. FIDELITY AND GUAR. v. BRASPETRO OIL SERVICES

United States District Court, Southern District of New York July 25, 2002

UNITED STATES FIDELITY AND GUARANTY COMPANY AND AMERICAN HOME ASSURANCE COMPANY, PLAINTIFFS,

v.

BRASPETRO OIL SERVICES COMPANY, BANK OF TOKYO-MITSUBISHI, LTD. (FORMERLY KNOWN AS BANK OF TOKYO LTD.-JAPAN), AND LONG TERM CREDIT BANK OF JAPAN, LTD., DEFENDANTS. UNITED STATES FIDELITY AND GUARANTY COMPANY AND AMERICAN HOME ASSURANCE COMPANY, PLAINTIFFS, V. PETROLEO BRASILEIRO S.A.-PETROBRAS, ET AL., DEFENDANTS.

The opinion of the court was delivered by: Koeltl, District Judge.

Introduction

These consolidated cases concern the obligations and liabilities of United States Fidelity & Guaranty Co. ("USF & G") and American Home Assurance Co. ("AHAC") (collectively the "Sureties"), pursuant to performance guaranty bonds that were issued by those companies in connection with two massive naval construction projects in Brazil known as the P-19 and P-31 Projects. The Sureties issued the P-19 Performance Bond in the amount of \$110,512,660 on behalf of the construction consortium which was to perform the P-19 conversion, as principal, in favor of Braspetro Oil Services Co. ("Brasoil"), as the obligee. The Bank of Tokyo-Mitsubishi Ltd. ("Bank of Tokyo") and the Long-term Credit Bank of Japan, Ltd. ("LTCB") (collectively the "Japanese Banks"), which had provided funding for the project, were additional obligees on the P-19 Performance Bond under a Dual Obligee Rider to the Bond. The Sureties issued the P-31 Performance Bond in the amount of \$168,000,000 on behalf of a similar construction consortium that was to perform the conversion of the P-31 Project, as principal, in favor of Brasoil as the obligee.

The P-19 Project involved the design and conversion of a platform formerly used for oil and natural gas exploration, known as the Treasure Stawinner, into a semisubmersible oil and natural gas production platform. The conversion of the P-19 vessel, which is registered under Panamanian law, was the largest of its kind ever undertaken. The P-31 Project involved the design and conversion of an oil tanker (Very Large Crude Carrier, or "VLCC"), known as the Vidal de Negreiros, into a Floating Production, Storage, and Offloading vessel ("FPSO").

Both the P-19 and the P-31 Projects were plagued by huge cost overruns. Brasoil and its indirect parent, Petroleo Brasileiro S.A. Petrobras ("Petrobras"), claim that these overruns were caused by the construction consortia's substantial underbids on both projects and by market conditions for which Brasoil and Petrobras were not responsible. Therefore, Brasoil and Petrobras claim, they justifiably declared the construction contracts to be in default and called on the Sureties to meet their obligations on the Bonds. When the Sureties failed to do so, Brasoil had the projects completed and now looks to the Sureties for the cost of the completion of the projects and costs of delay for the projects. In addition to many other arguments and theories, the Sureties claim that Petrobras, which was managing the projects for Brasoil, substantially changed the nature of the projects by making numerous changes in the requirements of the contracts, without notice to the Sureties, and that it was these changes, for which the construction consortia had not been compensated, that vastly increased the costs of the projects. The Sureties claim that the construction consortia were not actually in default under the construction contracts and that, because of the substantial changes which changed the nature of the contracts, the Sureties were discharged from any requirement to pay any amounts under the Bonds.

In the Declaratory Judgment Action, No. 97 Civ. 6124, the Sureties seek a declaratory judgment against Brasoil and the Japanese Banks that the Sureties have no obligations or liabilities under the Bonds. Brasoil, joined by the Japanese Banks with respect to the P-19 Bond, denies the Sureties' allegations and counterclaim to require the Sureties to pay the amounts owed under the Bonds. In the Indemnity Action, No. 98 Civ. 3099, the Sureties sue Petrobras, the individual members of the construction consortia, and others, claiming, under numerous alternative theories, that the Sureties are entitled to indemnification for any costs they are required to pay under the Bonds. In the Indemnification action, the Sureties claim that by its domination and control of the construction consortia, as well as pursuant to theories of partnership, Petrobras is liable for the indemnification obligations of the construction consortia to the Sureties. The Sureties also claim that Petrobras tortiously interfered with the payment obligations of the construction consortium on the P-19 Project and Brasoil under a payment bond issued to secure financing provided to the P-19 Project by Marubeni America Corp. ("MAC"). The Sureties have also sued the members of the construction consortia and others, but those claims have been severed pending resolution of the current claims among the Sureties, Brasoil, Petrobras, and the Japanese Banks. This is only a summary of the claims, which are discussed in greater detail below.

The Court conducted a non-jury trial from January 22, 2002 through March 21, 2002. The Court heard additional testimony from experts on Brazilian law on April 10, 2002. Having heard the extensive testimony from the witnesses and having assessed their credibility, and having reviewed the massive documentary evidence in this case, the Court makes the following findings of fact and reaches the following conclusions of law.

FINDINGS OF FACT

The Parties

The Sureties

1. At all relevant times, plaintiff United States Fidelity and Guaranty Company ("USF & G") was a corporation duly organized and existing under the laws of the State of Maryland with its principal place of business in Baltimore, Maryland. In 1998, USF & G was acquired by The St. Paul Companies. (Joint Stipulation of Facts, dated February 1, 2002 ("JS"), ¶ 4.)

2. At all relevant times, plaintiff American Home Assurance Company ("AHAC") was a corporation duly organized and existing under the laws of the State of New York. AHAC maintained its principal place of business in New York City. AHAC is a wholly owned subsidiary of the American International Group ("AIG"). (JS ¶ 5.)

3. At all relevant times, USF & G and AHAC (collectively the "Sureties") each engaged in the general surety bond business. (JS \P 6.) USF & G and AHAC each maintained its own separate underwriting and claims functions. (JS \P 7.)

4. At all relevant times, Anthony Buono and Kenneth Bazaar headed USF & G's international surety underwriting operations and were responsible for the underwriting of surety bonds on international projects. Mr. Bazaar worked at USF & G from January, 1994 to April, 1997. Mr. Buono worked at USF & G from February, 1994 to July, 1996. (JS ¶¶ S-10.)

5. Gary Wilson is an attorney currently in the private practice of law and was the head of USF & G's surety claims department between 1992 and April, 1998. (JS ¶ 14.)

6. Michael Yang is a senior underwriter and a senior vice president of American International Underwriters, Inc., a part of AIG. (JS ¶ 17.) Michael Fay was a vice president of international surety for the commercial lines of American International Underwriters, a part of AIG, from 1994 until 1999. Mr.

Yang and Mr. Fay made the decision on behalf of AHAC to underwrite the P-19 and P-31 bonds. (JS ¶¶ 12, 17.)

Petrobras Braspetro and Brasoil

7. Defendant Petrobras Brasileiro S.A.-Petrobras ("Petrobras") is a "mixed economy" corporation, which under Brazilian law means that is it is a joint stock corporation in which the Federal Republic of Brazil owns more than 50% of the voting shares and capital. (JS ¶ 18.)

8. Petrobras was created by government act and is duly organized and existing under the laws of the Federal Republic if Brazil. Petrobras' principal place of business is located in Rio de Janeiro, Brazil. (JS ¶ 19.)

9. Petrobras was established in 1953 pursuant to Brazilian Law No. 2.004, dated October 3, 1953. Petrobras was created to serve as the executor of Brazil's monopoly of its national oil industry. Between 1953 and August 6, 1997, Petrobras held a monopoly in Brazil on the prospecting, production, refining, processing, marketing and transportation of oil, petroleum from other derivatives, natural gas, and other Liquid hydrocarbons, as well as other related activities. Any amendments or revisions of the Charter or By-Laws of Petrobras must be approved by the President of Brazil and/or by the Brazilian Congress. (JS ¶ 20.)

10. Brazilian statutory law and Petrobras' own By-Laws each require that the Federal Republic of Brazil hold a majority of Petrobras' voting capital and total capital. The Federal Republic of Brazil currently holds a majority of Petrobras' voting shares of capital stock and has supplied a majority of Petrobras' paid-in capital. (JS ¶ 21.)

11. Defendant Braspetro Oil Services Company ("Brasoil") is a wholly-owned subsidiary of Petrobras Internacional S.A. Braspetro ("Braspetro"), which in turn is a wholly-owned subsidiary of Petrobras. Braspetro is a corporation duly incorporated and existing under the laws of Brazil, with head offices in Rio de Janeiro. Like Petrobras, Braspetro is financially accountable to the Brazilian Congress. The Administrative Council of Braspetro has exactly the same membership as Petrobras' Administrative Council. (JS ¶ 22.) 12. Braspetro's administrative executive committee, which makes daily decisions concerning the management of the company, is composed of up to six members, including Braspetro's President, who is also Petrobras' President. The President of Petrobras also has veto power over the decisions of the executive committee of Braspetro. (JS ¶ 23.)

13. Brasoil is a corporation duly organized and existing under the laws of the Cayman Islands. (JS ¶ 24.) Brasoil is the obligee on the P-31 Bond and a co-obligee on the P-19 Bond at issue in this case.

14. Brasoil is a wholly owned subsidiary of Braspetro with the exception of qualifying shares owned by the directors of the company. Through Braspetro, Petrobras indirectly owns Brasoil. Brasoil's officers, including its three directors, treasurer, chief engineering officer, secretary, and drilling services officers, are Braspetro and/or Petrobras employees and are paid by Braspetro and/or Petrobras. (JS ¶ 25.)

15. Brasoil and Petrobras are collectively referred to as the "Petrobras Defendants" at various points herein.

Organizational Structure and Personnel of Petrobras

16. Petrobras is governed by a Conselho do Administraçao, also known as the Administrative or Management Council, the members of which are appointed by the President of Brazil. The Administrative Council functions much like the Board of Directors of an American corporation. The President of the Administrative Council is also appointed by the President of Brazil, may be summarily dismissed, and has veto power over decisions of the Administrative Council. (JS ¶ 27.)

17. Petrobras is managed by its "Diretoria," or executive directorate, all of whose members are officers of Petrobras. Each member of the Diretoria is also a member of the Administrative Council and is responsible for the day-to-day management of particular department(s) or function(s) within Petrobras. (JS ¶ 28.)

18. Petrobras maintains various departments and superintendencies relating to all aspects of its operations, many of which were not involved in the issues and events raised in this case. A list of the most significant Petrobras structures for purposes of this case follows:

(a) SEGEN is the acronym used to denote the Petrobras superintendency in charge of design and engineering aspects of oil and natural gas exploration, production, and transportation facilities.

(b) E & P is the acronym used to denote the Petrobras superintendency in charge of oil and natural gas exploration and production.

(c) SEFIN is the acronym used to denote the Petrobras superintendency in charge of financial services.

(d) SEJUR is the acronym used to denote Petrobras' legal department. (JS ¶¶ 29, 30, 34-37.)

19. Joel Renno was the President of Petrobras between 1992 and 1998. (JS ¶ 41.)

20. Sebastiào Henriques Vilarinho was a member of the Petrobras Administrative Council and Diretoria. At all relevant times, and among his other duties and areas of authority, Mr. Vilarinho was the member of the Diretoria responsible for the administration of SEGEN. (JS ¶ 43.)

21. Alceu Barroso Lima Neto was the general superintendent of SEGEN between August 1995 and 1998. Mr. Alceu managed Petrobras' investments in production, transport, and refining of oil and gas, including pipelines, refineries, and platforms. Mr. Alceu was also designated to manage certain of Brasoil's construction contracts, including engineering and assembly matters. As head of SEGEN, Mr. Alceu supervised over ten Brasoil conversion and construction contracts, including the P-19 and P-31 Projects. (JS ¶¶ 44-46.)

22. Luis Carlos Quintella Freire is an engineer and was the Deputy Superintendent of SEGEN between April 1996 and April 1999, where Mr. Quintella supervised Petrobras' investments in production, transport and refining of oil and gas and Brasoil's construction contracts, including the P-19 and P-31 Projects. (JS ¶ 46.)

23. Paulo Marcio Mauro is an engineer and, at all relevant times, was the Chief of Engineering Services for the Marlim Enterprise of Petrobras. The Marlim Field is an oil field off the coast of Brazil in which the P-19 Project was to be located. (JS ¶¶ 47, 126.)

24. David Almeida Schmidt is an engineer and was the platform coordinator ("COPLAT") for the P-19 Project between mid-1995 and early 1998. (JS \P 49.)

25. Arnaldo Samuel Arcadier is an engineer and, between mid-1994 and early 1995, was the coordinator of the Bid Committee and subsequently served as the COPLAT for the P-19 Project from February 1995 until July 1995. (JS ¶ 50.)

26. Marcio Ferreira Alencar is an engineer and was the Chief of the Engineering and Support Section ("SESGE") for the P-19 Project from approximately February 1995 through the beginning of 1998. (JS ¶ 51.) Mr. Alencar succeeded David Schmidt as the COPLAT for the P-19 Project in about March 1998, and continued in that position until about January, 1999. (Tr. at 3045.)

27. Antonio Carlos Alvarez Justi is an engineer and, at all relevant times, was the Chief of Engineering Services for the Albacora Enterprise. (JS ¶ 52.) The Albacora Field is also an oil field off the coast of Brazil. The P-31 Project was to be located in the Albacora Field. (JS ¶ 125.)

28. Edison Krummenauer is an engineer, was the Coordinator for the Bid Committee for the P-31 Project, and was the COPLAT for the P-31 Project through September or October 1998. (JS ¶ 54.)

29. Jose Eduardo Loureiro is an engineer and was the Chief of the Engineering and Support Section ("SESGE") for the P-31 Project from the commencement of the P-31 Project through the end of 1996. (JS ¶ 56.)

30. Paulo Henrique Ximenes Duprat provided design supervision on the P-31 Project. Mr. Duprat succeeded Mr. Loureiro as the Chief of SESGE for the P-31 Project in early 1997. (JS ¶ 58.)

31. Marcio Eiras Moraes was at all relevant times the Superintendent of SEFIN. (JS ¶ 59.)

The Banks

32. Defendant The Bank of Tokyo-Mitsubishi, Ltd. ("BTM"), formerly known as The Bank of Tokyo Ltd.-Japan, is a corporation organized under the laws of Japan and has its principal place of business in Tokyo, Japan. (JS ¶ 70.)

33. Shinsei Bank, Ltd. is the successor in interest to the defendant The Long-Term Credit Bank of Japan, Ltd. ("LTCB"). Shinsei Bank Ltd. is a corporation organized under the laws of Japan and has its principal place of business in Tokyo, Japan. (JS ¶ 71.)

34. BTM and LTCB (collectively the "Japanese Banks") are parties to a Loan Agreement dated May 22, 1995 among Brasoil, BTM, and LTCB, in which BTM and LTCB committed to loan Brasoil up to \$175 million for the P-19 Project. As part of their collateral for this Loan, the Banks were named co-obligees on the P-19 Performance Bond. Brasoil, the Construction Consortium for the P-19 Project, and the Sureties entered into a Dual Obligee Rider to the P-19 Bond on August 30, 1995, in which the parties named the Banks "obligees" on that Bond. (JS ¶ 72.)

The Construction Contractors: IVI, Sade Vigesa, and IESA

35. Defendant Industrias Verolme-Ishibras S.A. ("IVI") is a corporation duly organized and existing under the laws of the Federal Republic of Brazil with its principal place of business in Curitiba. IVI was the result

of a merger effective September 1994 between Emaq-Verolme SA, which owned the Verolme shipyard located in Angra dos Reis (Tr. at 446-47), and Ishikawajima do Brasil Estaleiros SA, which owned the Ishibras shipyard located in Rio de Janeiro. (JS ¶ 73.)

36. Defendant SV Engenharia SA was a corporation duly organized and existing under the laws of the Federal Republic of Brazil. SV Engenharia SA was formerly known as Sade Vigesa S.A. ("Sade Vigesa" or "Sade"). Sade Vigesa changed its name to SV Engenharia S.A. on or about January 31, 1997. (JS ¶ 76.)

37. Defendant Internacional de Engenharia S.A. ("IESA") was at all relevant times a corporation duly organized and existing under the laws of the Federal Republic of Brazil. At all relevant times, IESA was engaged in, among other matters, the business of oil and natural gas process engineering and design. (JS ¶ 95.)

38. IVI and Sade Vigesa entered into a formal consortium agreement on February 1, 1995 for the stated purpose of bidding for and performing the P-19 Project. The consortium agreement authorized IVI to represent the consortium (the "P-19 Consortium") in its dealings with Brasoil. The P-19 Consortium was the successful bidder for the P-19 Project and entered into a construction contract (the "P-19 Contract") with Brasoil for that Project. (JS ¶¶ 135-36, 144.) IESA was a subcontractor on the P-19 Project. (JS ¶ 96.)

39. IVI, Sade Vigesa, and IESA entered into a formal consortium agreement on October 5, 1995. The stated purpose of the consortium (the "P-31 Consortium") was to bid for and perform the P-31 Contract. The consortium agreement authorized IVI to represent the P-31 Consortium in its dealings with Brasoil. The P-31 Consortium was the successful bidder for the P-31 Project and entered into a construction contract with Brasoil for that Project. (JS ¶¶ 162, 164, 168.)

40. Nelson Tanure was the President of Sade Vigesa until about July of 1995, and was President of IVI until August of 1995. (JS \P 78.)

41. David Fischel served as President of IVI from August 1995 to May 1997 and managed the P-19 and P-31 Projects on behalf of a company related to Sade Vigesa until May 1997. He was also the President of Sade Vigesa between July 1995 and December 1996. (JS ¶ 79, 88.) 42. Carlos Mauricio Lima de Paula Barros is an engineer and, from June 1995 to December 1996, was the Vice President and a statutory director of Sade Vigesa. Between December 1996 and October 1997, Mr. Mauricio received compensation from a company related to Sade Vigesa for the management services he provided on the P-19 and P-31 Projects. (JS ¶ 80.)

43. Alarico Jose Andrade de Castro is a mechanical engineer and was the Director of Business Development of Sade Vigesa between 1995 and March 1996. In March 1996, Mr. de Castro was appointed Consortium project manager for the P-31 Project. Beginning in December 1996, Mr. de Castro received compensation from a company related to Sade Vigesa for the management services he provided on the P-31 Project. (JS ¶ 81.)

44. Guilherme Pires de Mello is an engineer. He was the P-19 Consortium project manager from June 1995 through his resignation in June 1997. (JS ¶ 84.)

45. David Fischel, Carlos Mauricio Lima de Paula Barros, and Guilherme Pires de Mello were employed by Montreal Engineering before they were brought in by the P-19 Consortium to manage the P-19 Project. (Tr. at 901-02, 905, 2019.)

Brasoil Retained Petrobras to Manage the P-19 and P-31 Contracts

46. Brasoil and Petrobras entered into a series of service agreements whereby Petrobras undertook to provide engineering, supervision, and inspection services with respect to the work carried out in connection with the P-19 and P-31 Contracts. (S-1010; Tr. at 2949-50.)

47. On or about September 19, 1994, Brasoil and Petrobras executed Addendum No. 6 to the Revised Reciprocal Cooperation Agreement Between Petroleo Brasileiro S.A. — Petrobras and Petrobras Internacional SA-Braspetro for Providing Engineering Services dated June 30, 1993 (the "Cooperation Agreement"). (PB-310; Tr. at 2950.) This addendum appointed Petrobras to manage the bidding process for the P-19 Project. (PB-310 ¶ 1.1; Tr. at 2951.) Brasoil agreed to pay Petrobras the sum of \$20,000 for its services. (PB-310 ¶ 5.1; Tr. at 2951; JS ¶ 220.)

48. On or about February 1, 1995, Brasoil and Petrobras signed into Addendum No. 7 to the Cooperation Agreement. (PB-311; Tr. at 2975.) This addendum appointed Petrobras to manage the conversion of the

P-19 platform by the P-19 Consortium. (PB-311; Tr. at 2974-75.) In return for its services, Petrobras was to receive a payment of \$2.1 million. (PB-311 ¶ 6.1; Tr. at 2975; JS ¶ 221.)

49. On or about March 18, 1995, Brasoil and Petrobras entered into Addendum No. 8 to the Cooperation Agreement. This addendum appointed Petrobras to manage the international bidding process for the contracting of the conversion of the VLCC Vidal de Negreiros into a FPSO to be known as P-31. Brasoil agreed to pay Petrobras the sum of \$20,000 for its services. (JS ¶ 222.)

50. On or about October 26, 1995, Brasoil and Petrobras entered into Addendum No. 16 to the Cooperation Agreement. (PB-325.) This addendum appointed Petrobras to manage the conversion of the VLCC Vidal de Negreiros into an FPSO to be known as P-31. (Id.) In return for its services, Petrobras was to receive a payment of \$2.1 million. (Id. ¶ 6.1; JS ¶ 223.)

The P-19 International Bid Process

51. The bidding process for the P-19 Project was conducted in compliance with the requirements of Law 8.666 of June 21, 1993, the Brazilian Public] Bidding Law. (JS ¶ 127; Tr. at 2956-57.) The bidding process was supervised by a bidding commission. (JS ¶ 127; Tr. at 2948-49, 2956-57.) Arnaldo Arcadier served as the coordinator of the bidding commission. (Tr. at 2948; S-14.)

52. A formal Invitation to Bid was published on September 16, 1994. (PB-279 at 1; JS ¶ 126; S-14 ¶ 2.) The contract was for the acquisition and conversion of an existing semi-submersible drill rig to be deployed offshore in the Marlim field. (JS ¶ 126.) The services to be provided included the supply of the platform, materials and equipment; construction and assembly; re-conditioning, maintenance, and adaptation of the platform; conditioning, tests, certification, pre-operation, transport, and assistance in the delivery phase. (Id.; PB-279 at 1.)

53. Pursuant to section 12 of the Invitation to Bid, prospective bidders could submit written questions to Brasoil to clarify the terms of the bid documents and any inaccuracies or discrepancies found in them. (PB-279 at 21; Tr. at 2959-60.) Any doubts not resolved through the clarification process would be subject to Brasoil's exclusive interpretation either at the time of the award of the bid or during the

performance of the bid. (PB-279 at 21.) Section 12.3 of the Invitation to Bid further provided that "any doubts arising after presentation of tenders will be subject to the interpretation of Brasoil." (Id.)

54. Prior to the submission of the sealed bids, Brasoil issued seven circular letters responding to requests for clarifications from the prospective bidders. (JS ¶ 128; Tr. at 2960; PB-279 at 73-198.) The letters were distributed to all interested parties. (JS ¶ 128; Tr. at 2960.)

55. The delivery of envelopes with sealed bid proposals took place at 2 p.m. on November 28, 1994. (JS ¶ 129; S-14 ¶ 2.) The bids were opened in three stages. (JS ¶ 130; Tr. at 2962-63; S-14 ¶¶ 3, 5, 9, 13.) In the first stage, the commission examined the financial and technical qualifications of the bidders. In the second stage, the commission determined whether the platforms proposed for conversion by the qualified bidders met the specifications set forth in the Invitation to Bid. The final stage was to open the sealed envelopes with the bid prices. (Tr. at 2962-63; S-14 ¶¶ 5, 10, 11.)

56. Three consortia and one company submitted bids. The bidders were: (1) Consorcio Construtores Offshore Associados ("COA") made up of Mendes Junior Montagens e Servicos, LTDA, Montreal Engenharia S.A., Ultratec Engenharia S.A. and Tenenge-Tecnica Nacional de Engenharia, (2) Consorcio Sembawang Bethlehem/Sembawang Shipyard, (3) Consorcio Industrias Verolme Ishibras made up of IVI and Sade Vigesa, and (4) Far East Livingston Shipbuilding (FELS). (JS ¶ 131; Tr. at 2962; S-14 ¶ 4.)

57. The bidding commission disqualified FELS for not complying with § 5.4c and 5.4d of the Invitation to Bid. In the second stage, the commission disqualified Consorcio Sembawang Bethelehem/Sembawang Shipyard because the platform proposed for the conversion did not meet the minimum size requirements stipulated in the Invitation to Bid. (JS ¶ 132; Tr. at 2962-63; S-14 ¶¶ 6, 11.)

58. After disqualifying FELS and the Sembawang Bethlehem Consortium, the Commission opened the sealed envelopes with the bid prices on January 3, 1995. (S-14 ¶ 13.) Consorcio IVI/Sade Vigesa was selected as the winning contractor based on a low bid of \$165,532,660. (S-14 ¶ 16.) The second-place bid was COA's, at \$177,888,238. (Id. ¶ 14.)

59. Petrobras had made its own estimate and determined an estimated average bid amount of \$172.3 million, within a range having a high end of approximately \$200 million and a low of approximately \$150

million. (PB-1289; Tr. at 2968-69.) Consorcio IVI/Sade Vigesa's bid was 4.09% below Petrobras' internal estimate. (Tr. at 2968; S-14 ¶¶ 16-17; PB-1289.)

60. On January 19, 1995 the Diretoria of Petrobras recommended to Brasoil that Brasoil enter into a contract with Consorcio IVI/Sade Vigesa (the "P-19 Consortium") for the acquisition and conversion of P-19. (Tr. at 2970-71; S-17 at 2-3.) The contract was to be subject to the precondition that the P-19 Consortium obtain a performance bond in accordance with the terms of the Invitation to Bid. (S-17 at 3; Tr. at 2984.)

61. The P-19 Consortium and Brasoil signed the P-19 Contract (Contract No. 821-2-002-095-2) on February 10, 1995. (JS ¶ 133.)

62. The P-19 contract did not go into effect until after the Consortium obtained the performance bond. (PB-579.) The contractual provision for a performance bond issued by a first rate insurance company was a safeguard for Petrobras. (Tr. at 2988.) The performance bond was of the utmost importance to Petrobras, and the Consortium would not have been permitted to undertake the project without the performance bond. (Id. at 2984, 2987-88.)

The P-19 Consortium Underbid the P-19 Project

63. The Invitation to Bid required bidders to submit a fixed lump sum price for Schedule A services and a flexible estimate with unit prices for Schedule B services. (PB-279 at 12, 581-587.) Schedule A encompassed:

Supply of a semi-submersible platform, converted from an existing vessel, including for this purpose the supply of the vessel, its transportation to job site and the execution of design, procurement, construction and assembly, services in the vessel to restore to an "as new condition", vessel adaptations and modifications, commissioning, testing, pre-operation, certification, and transportation to Campos Basin and start-up assistance....

(Id. at 582.)

64. The schedule B price covered "direct labor support" for offshore start-up assistance. (Id. at 218.) The unit prices in schedule B were also to be used to calculate change orders. (Id. at 224.) The unit prices specified the wages that would be paid to workers by trade and skill. (Id. at 583-86.)

65. The P-19 Consortium submitted a bid of \$163,000,000 for the Schedule A work and an estimate of \$2,532,660 for the Schedule B work. (Id. at 581; Tr. at 2797.) The total bid price was \$165,532,660. (S-14 ¶ 14.)

66. The Consortium initially budgeted the project at approximately \$169 million. For competitive reasons, the Consortium chose to reduce this amount to \$163 million in its bid. (Tr. at 2827.)

67. The P-19 Consortium budget was plainly inadequate. It contained no provision for any contingency. (Id. at 3829.) The P-19 Consortium hoped to realize a profit by negotiating discounts from suppliers after the Contract was signed. Indeed, the P-19 Consortium budgeted for a twenty percent reduction in vendor prices in the expectation of reduced prices after it had the contract in hand. (id. at 4079.)

68. An important part of the cost of the P-19 Project was the purchase of the vessel to be used for the project. The original contract schedule provided that the P-19 Consortium would be paid \$40.75 million (25% of the schedule A price of \$163 million) when the platform was delivered to Brasoil prior to conversion. (PB-279 at 589-91.) The P-19 Consortium chose to purchase the Treasure Stawinner for the conversion project at a cost of \$55 million. (JS ¶ 225; PB-438 ¶ 4.4.) Consequently, the balance of \$14.25 million had to be made up by a savings in some other budget category. (Tr. at 3016-17, 4074-75; PB-760.)

69. The P-19 Consortium's budget either did not provide or made inadequate allowance for other important budget items. (Id. at 3827-31; 4092, 4094.) Shipyard overhead was only budgeted for \$15,000 even though the project was scheduled to last twenty-four months. (Id. at 3831, 4092.) In addition, the budget did not include substantial financing charges that the Consortium incurred due to its weak financial condition. (Id. at 4074-76.)

70. The P-19 Consortium obtained its equipment quotes for the bid in or about November 1994, but did not start placing its equipment orders until well after the quotations had expired. (Id. at 4078-79.) The Consortium could have locked in its equipment prices by obtaining binding quotations from vendors (at a price), but it failed to do so. (Id.) Consequently, the Consortium's project costs were extremely sensitive to fluctuations in the price of equipment and materials.

71. Initially 70% of the Schedule A price was tied to the procurement of equipment, materials and the vessel itself. (PB-279 at 589.) At the request of the Consortium, on March 1, 1996 the percentage for procurement was increased to 80% of the Schedule A price through Amendment One to the P-19 Contract. (PB-71 at 1, 6.)

72. Thus, after March 1, 1996, only 20% of the total contract price was subject to the control of the P-19 Consortium. As a result, the Consortium had minimal flexibility to offset overruns on equipment with savings in budget line items under its control.

73. Commencing in or about 1995, there was an increase in the number of platform conversions worldwide and an upturn in demand for production and process equipment. (PB-438 ¶ 4.1; Tr. at 4085-88.) With increased demand, prices for production and process equipment escalated. The P-19 Consortium did not anticipate price increases and had not included a contingency provision in its budget. (PB-438 ¶¶ 4.1, 4.5; Tr. at 2246.) As a result, the Consortium found itself paying far more for essential equipment than it had originally budgeted. (PB-438 ¶¶ 4.4-4.5.)

74. The P-19 Consortium also was hurt by the overvaluation of the Brazilian currency in 1995-97. (PB-438 ¶ 4.2.) The contract price was in United States dollars, but labor and domestic equipment had to be paid for in Brazilian reais. (PB-438 ¶ 4.2.)

75. Many P-19 Project items ended up costing considerably more than the Consortium had budgeted. For example, IVI labor and consumables costs exceeded the budget (even after adjustments for changes) by approximately \$15.4 million, an overrun of approximately 139%; shipyard overhead cost approximately \$6.8 million, although the budget only anticipated \$15,000; turbomachinery cost approximately \$4.1 million more than the budgeted amount; the adjusted imported vessel equipment cost was approximately \$19.9 million, a 67% overrun; and the adjusted domestic equipment cost was approximately \$6.6 million, although the budget did not provide for any such costs. (Tr. at 3828-31, 4090-93.) The Sureties' Issuance of the P-19 Bond

76. On April 5, 1995, the Sureties issued a Performance Bond, Bond Nos. 29-34902-95-5 (USF & G) and 15-61-23 (AHAC) (the "P-19 Bond"), in the penal sum of \$110,532,660, on behalf of the P-19 Consortium, as principal, in favor of Brasoil, as obligee, in connection with the P-19 Contract. (S-72A.) The bond amount reflected the contract amount of \$165,532,660 minus the \$55,000,000 cost of the Treasure Stawinner, the platform to be converted. The P-19 Bond was in the form of an American Institute of Architects Document A312 ("AIA 312") Performance Bond. On August 30, 1995, Brasoil, the P-19 Consortium, and the Sureties entered into a Dual Obligee Rider to the P-19 Bond, in which they named the Japanese Banks as additional obligees on that Bond. (Id. at 8; JS ¶ 150.)

77. Brasoil paid the Sureties a premium of \$2,579,058 for the P-19 Bond. (JS ¶ 151.) The price of the performance bond was not part of the lump sum price for the conversion. (PB-279 at 227-28.)

78. Several provisions of the AIA 312 Performance Bond are particularly important for purposes of this case. Some of those provisions are set out below for purposes of understanding the disputes that arose.

79. Under Paragraph 1 of the Bond, the Sureties (collectively referred to in the Bond as the "Surety") and the P-19 Consortium (referred to as the "Contractor") jointly and severally bind themselves to "the performance of the Construction Contract, which is incorporated by reference."

80. Under Paragraph 3, if there is no default by Brasoil as the project's Owner,

the Surety's obligation under this Bond shall arise after:

3.1 The Owner has notified the Contractor and the Surety . . . that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety. . . .; and

3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract . . .; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the Contract with the Owner.

The "conference" contemplated in ¶ 3.1 of the Bond is commonly referred to herein as a "3.1 Meeting."

81. Under Paragraph 4, When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract . . . and pay to the Owner the

amount of damages . . . in excess of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment thereafter to the Owner; or

.2 Deny liability in whole or in part and notify the Owner citing reasons therefor.

82. Under Paragraph 8, "The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations."

83. Typically, a surety undertakes a rigorous investigation of a contractor's financial condition and prior relevant experience before issuing a bond. (Tr. at 4414-15.) This is because in issuing a bond a surety undertakes the risk that the contractor will be unable to complete the project for financial reasons, and the risk that the contractor may not have sufficient financial capability to absorb or answer for any loss that occurs. (Id. at 4416.) A surety reviews the contract to understand the contractual obligations that are being bonded, but a surety typically does not make a determination whether the contractor can actually perform the contract for the specific price bid because the surety lacks the expertise to make that determination. (Id. at 4415-16.)

84. In this case, it does not appear that the underwriters reviewed the construction contracts before issuing the P-19 or the P-31 Bonds. (Tr. at 1377-78; 3302; 4423.) The financial information that the Sureties received should have raised questions about the financial condition of IVI. (Tr. at 4425-36.)

85. The Sureties had various indemnification agreements from various parties that provided them with protection should they be required to make payments under the bonds. As a named principal, defendant Sade Vigesa entered into Agreements of Indemnity in favor of USF & G, as surety, dated August 19, 1994 and February 17, 1995. The stated limit of indemnity under the August 19, 1994 Agreement of Indemnity is \$200 million. The stated limit of indemnity under the February 15, 1995 Agreement of Indemnity is \$500 million. On February 17, 1995, IVI, Sade Vigesa, and a company that was a significant shareholder of IVI executed another indemnity agreement in favor of the Sureties. On March 22, 1996, other companies, which have been severed for purposes of the current trial, executed an indemnity agreement in favor of USF & G. The stated limit of indemnity under the March 22, 1996 agreement is \$200 million. (JS ¶¶ 195-198.)

Relevant Provisions of the P-19 Contract

86. The P-19 Contract was an engineering, procurement, and construction contract ("EPC Contract") to be performed on a turn key, lump sum basis. (JS ¶ 145; Tr. at 3055-56; PB-279 at 218 §§ 5.2, 5.4.)

87. The lump sum (Schedule A) contract price covered all work for the supply of a semi-submersible platform, converted from an existing vessel, including for this purpose, the supply of the vessel; its transportation to the job site; the execution of design, procurement, construction and assembly services in the vessel to restore it to an "as new" condition; vessel adaptations and modifications; commissioning, testing, pre-operation; certification; transportation to the Campos Basin; and start-up assistance. (PB-279 at 582.) The Schedule A price was \$163,000,000, as the Consortium had bid. (Id. at 218 § 5.1.1; JS ¶ 143.)

88. Schedule B of the P-19 Contract specified unit prices for labor for offshore services. (PB-279 at 583.) These prices could not change; however the total amount paid under Schedule B was flexible in that it was based on the actual quantities incurred to complete the work. (Id. at 218 § 5.3.) The estimated Schedule B price of \$2,532,660 was also in accordance with the Consortium's bid. (Id. § 5.1.2; JS ¶ 143.)

89. The P-19 Contract specified that the prices in schedules A and B were to include profit and overhead. (PB-279 at 218 § 5.4.) The total contract price was \$165,532,660 (Id. § 5.1.)

90. The P-19 Contract used a project breakdown schedule ("PBS") or work measurement structure, for progress payments. (PB-279 at 219, 588.) The PBS is a logical and systematic means of dividing a single large project, via a hierarchal structure, into a very large number of individual tasks. Payment is linked to the completion of specified benchmarks. The benchmarks were identified in Annex VI to the P-19 Contract. (PB-279 at 588-597.) The weightings for each task were assigned in accordance with an Analytical Structure of Payments ("EAP"). (Id.; Tr. at 542-43.)

91. Under the P-19 Contract, the Consortium was to invoice Brasoil by submitting a Measurement Bulletin ("BM") which outlined in full detail the services that had been performed the prior month and calculated the percentages that were due under the EAP system. (PB-279 at 219.) Petrobras would confirm that the services had been performed, and approve the BM for payment.*fn1 Petrobras and the P-19 Consortium would often negotiate whether the Consortium was entitled to credit for having achieved a given benchmark.

92. Time was of the essence. Section 6.1 of the P-19 Contract's General Conditions required the Consortium "to comply strictly with the time period stipulated in the Contract in relation to the performance of the work contracted for." (PB-279 at 267.)

93. The P-19 Contract was to be completed within 840 running days (720 on-shore plus 120 offshore). The completion date for the on-shore work was initially set for March 23, 1997, with the offshore portion to be concluded on July 23, 1997. The parties subsequently agreed in Amendment Two to the Contract to extend the completion date for the shipyard services by sixty days to May 24, 1997 and the offshore completion date to September 21, 1997. (JS ¶ 146.)

94. The Contractor was required to provide written notice of "[d]ays on which work is at a standby due to demands for modifications of design on the part of Brasoil, and which manifestly affect the progress of the work or are the result of delays in the supply of materials for which Brasoil is responsible" in order to claim extensions of time due to the fault of Brasoil. (PB-279 at 267 § 6.3.)

95. The P-19 Consortium had 90 days from the signing of the Contract on February 10, 1995 to transfer title to the platform to Brasoil. (Id. at 200, 206.) Therefore, the transfer of the vessel was to take place on or before May 10, 1995.

96. Section 3.13 of the P-19 Contract required the P-19 Consortium to endorse the consistency of the Technical Documentation provided by Brasoil within sixty days of the signing of the Contract. (Id. at 207.) Thereafter, any errors or contradictions became the responsibility of the P-19 Consortium. (Id. at 207 § 3.13.1.)

97. IESA, the P-19 Consortium's subcontractor, issued a "Report on the Basic Design Consistency Analysis," which was received by Petrobras on April 25, 1995. PB-1274; Tr. at 3127.) According to the Report, no serious inconsistencies were found in the basic design and "Petrobras' basic project possesses satisfactory degrees of consistency and scope allowing, without any major difficulty, for its consolidation and subsequent elaboration." (PB-1274 at 10-11.)

98. Offshore production of oil and gas is an inherently hazardous activity. The completed platform was to be stationed approximately one hour's flight offshore for twenty years. (Tr. at 2947, 2980; PB-279 at 78.) There would be no opportunity to remove the platform to shipyards on shore for repair and refit, and the platform had to be capable of operating twenty-four hours a day, seven days a week in a harsh marine environment. Thus, the P-19 Contract required rigorous compliance with technical and safety specifications.

99. The Contract gave Petrobras broad rights to inspect the work on the project and insist on strict compliance with the Contract. (PB-279 at 202, 226, 260, 271-72, 716.)

100. Section 2.3.1 of Appendix III to the Contract required the P-19 Consortium to provide facilities at the job site for a Petrobras supervisory team consisting of "at least 20 and at most 40 persons." (PB-279 at 577.)

101. The P-19 Contract authorized Petrobras to attend expediting and technical meetings with vendors. (PB-279 at 623-24.) Petrobras employees did not participate in the negotiation of the commercial terms of the vendor contracts.

102. The platform had to be approved and certified by a classification society. (Id. at 207-08.) Section 3.15.12 of the Contract provided that the classification society "shall be involved in all phases of the work contracted, from the design phase, and including procurement, construction, assembly, commissioning, testing, pre-operation and transportation, up to final Classification/Certification" of the

platform. (Id. at 208.) The P-19 Consortium retained Bureau Veritas as the platform's classification society. (Tr. at 3346.)

103. The P-19 Contract expressly provided that "approval by Brasoil of documents referring to Design, Procurement, Construction and Assembly, Conditioning and Pre-Operation does not limit or modify [the Consortium's] responsibility for performance of the object of this Contract." (PB 279 at 205 § 3.3.)

104. Section 3.23 of the P-19 Contract stipulated that materials and equipment acquired for the purpose of the Contract became "the property of Brasoil and shall be exempt from seizure in the event of bankruptcy or bankruptcy protection proceedings involving the [Consortium], the latter being required to notify the Courts of these circumstances." (PB-279 at 209.) The P-19 Consortium was to acquire equipment and materials as a "faithful custodian" and undertook to see to their safekeeping. (Id.)

105. Section 3.23.2 of the P-19 Contract specified that equipment and materials acquired for the purpose of the Contract would be the property of Brasoil, even if it had not yet been received at the job site, if purchase orders had been issued for said equipment and materials. (Id.)

106. Section 9.3 of Appendix VIII required the Consortium to supply certain documents to Brasoil for Brasoil's approval. (Id. at 606.) Sections 9.3 and 9.4 stated that if Brasoil failed to return its comments within fourteen days from the date of receipt, such documents would be considered "released," unless the delay were justified by Brasoil and reported in advance to the P-19 Consortium. (Id.)

107. Section 5.1 of Appendix VIII specified that "all verbal communications, whenever necessary, shall be confirmed later by letter or meeting notes." (Id. at 602.) Section 6.2 further provided that all subjects discussed at weekly technical or administrative meetings were to be formalized by meeting notes, issued immediately after the end of the meeting. (Id.)

Delays in the Commencement of the P-19 Project

108. Section 9.1 of the Invitation to Bid required the winning bidder to provide a performance bond within twenty days of the release of the bidding results. (Id. at 20.) The time limit could be extended at

the sole discretion of Brasoil. (Id.) The report of the bidding commission was dated January 9, 1995 (S-14 at 4), 50 the P-19 Consortium was required to procure the bond no later than January 29, 1995.

109. The P-19 Contract was signed on February 10, 1995. (PB-279 at 258.) Section 15.6 of the Contract provided that the performance bond was to be delivered to Brasoil on signature of the Contract. (Id. at 228.) The P-19 Consortium was still attempting to obtain a performance bond when the P-19 Contract was signed. (PB-282; Tr. at 2985-86.)

110. The P-19 Consortium requested extensions of time to obtain the performance bond. (Tr. at 2985-88; S-51.) Brasoil allowed the P-19 Consortium to have the extra time. (Tr. at 2986.)

111. The P-19 Consortium did not obtain the performance bond until April 5, 1995, 54 days after the execution of the Contract. (Id. at 2989; S-72A.)

112. Brasoil issued an Service Authorization, which allowed work on the project to go forward, immediately upon the Consortium's obtaining the bond. (Tr. at 2697-99; PB-579.)

113. The PBS provided for a payment of 25% of the schedule A price (\$40.75 million) when the platform was transported to the job site. (PB-279 at 589.) On February 10, 1995, IVI entered into an option agreement with Winner Drilling Ltd. to purchase the Treasure Stawinner drilling platform for \$55 million. (JS ¶ 122.) At the time, the Treasure Stawinner was under lease to Petrobras and was engaged in drilling operations off the coast of Brazil. (Tr. at 2977; JS ¶¶ 121, 134.) The higher-than-budgeted price of the platform left a gap of \$14.25 million to be financed by the P-19 Consortium. (Tr. at 1038, 3016-17; JS ¶ 241.)

114. The P-19 Consortium entered into an agreement with Marubeni America Corporation ("MAC") to obtain the gap financing. (JS ¶ 242.) MAC made the gap financing contingent upon the P-19 Consortium purchasing turbogenerators from Dresser and turbocompressors from Dresser/Solar using MAC as the purchasing agent. (JS ¶ 242.) The Dresser and Solar equipment was \$8 million more expensive than comparable equipment from another vendor. (PB-438 § 4.4.)

115. As security for the equipment financing, MAC required and the P-19 Consortium obtained a payment bond in the amount of \$38 million from the Sureties. (JS \P 244.)

116. The closing of the purchase of the Treasure Stawinner occurred on June 29, 1995, 79 days after delivery was supposed to have occurred under the Contract and 24 days after Petrobras's manager expected the platform to arrive at the shipyard, in view of the late date of the Service Authorization. (Id. ¶ 245; Tr. at 3021.)

117. Preparatory work began on P-19 in Angra dos Reis at the beginning of July, 1995, nearly five months after the signing of the Contract. (Tr. at 2948.) The initial work involved the removal of drilling equipment. This dismantling work was not completed until November 1995. (Id. at 2712.)

118. On May 22, 1995, Arnaldo Arcadier, Petrobras's P-19 project manager, wrote Amauri Rodrigues, the P-19 Consortium's project manager, to complain "bout the slow progress of the P-19 Consortium in getting procurement organized. (S-77; Tr. at 3006-07.)

119. Throughout the time that Arnaldo Arcadier worked on the P-19 Project, the P-19 Consortium lacked the capacity to procure equipment and materials effectively. (Tr. at 2997.) It lacked an international arm for procurement as well as an internal structure. The Consortium delayed in placing orders for long lead items, such as turbomachinery, and failed to plan adequately for purchases. (Id. at 2997-3001.) Mr. Arcadier wrote several letters to the Consortium expressing the dissatisfaction of Petrobras with the Consortium's procurement function. (Id. at 3001.)

120. In June, 1995, Guilherme Pires assumed the management of the P-19 Project for the P-19 Consortium. (Id. at 2019.) Pires was part of the team that the P-19 Consortium brought in from Montreal Engineering which also included David Fischel and Carlos Mauricio. (Id.)

121. On August 8, 1995, six months after the signing of the P-19 Contract, the Consortium entered into a contract with Mustang Engineering, Inc. ("Mustang") establishing that Mustang would act as procurement agent for the Consortium in the United States. ("JS ¶ 157-58.)

122. The P-19 Consortium did not line up financing for the purchase of imported equipment until October 25, 1995, when IVI and Sade Vigesa signed a Note Purchase and Credit Agreement with

Mustang and the Canadian Imperial Bank of Commerce ("CIBC"). Pursuant to this agreement, CIBC agreed to purchase \$80 million in promissory notes that IVI and Sade Vigesa issued to Mustang to pay for the purchase of equipment imported from the United States. The promissory notes were guaranteed by the Export-Import Bank of the United States ("Exim Bank") under the Financial Institution Buyer Credit Policy, Consortium IVI-Sade Vigesa, Brasil (FB 157438). (Id. ¶ 159; PB-611.) The notes were payable 360 days after the date of issuance. (PB-611 § 3.1(a).)

The P-31 International Bid Process

123. On March 20, 1995 a public meeting was held initiating the international public bidding process for the award of the Contract for the conversion of the Vidal de Negreiros (the "Vidal"), a Very Large Crude Carrier ("VLCC"), into a Floating Production, Storage, and Offloading ("FPSO") unit called P-31. The notice of the invitation to bid was published on May 15, 1995. Edison Krummenauer, who later served as Petrobras' P-31 project manager, acted as the coordinator of the bidding commission. (JS ¶¶ 120, 160; S-1136.)

124. The bidding process was required to comply with the Brazilian Public Bidding Law (Law 8.666 of 1993). (JS ¶ 160.)

125. IVI, Sade Vigesa, and IESA (the "P-31 Consortium") entered into a formal consortium agreement on October 5, 1995. Under the consortium agreement, the stated purpose of the P-31 Consortium was to bid for and perform the P-31 Contract. The consortium agreement authorized IVI to represent the P-31 Consortium in its dealings with Brasoil. (Id. ¶ 168.)

126. The Vidal was made available for inspection by interested parties from May 27 to June 27, 1995. (Id. \P 175.)

127. The P-31 Consortium inspected the Vidal on two occasions. (Id.) As part of its bid, IVI, Sade Vigesa, and IESA each executed a declaration dated August 24, 1995 attesting that it was aware of all the works and installations that would be incorporated on the vessel in the course of the project and of the current condition of the vessel itself. (PB-24.) The declaration was signed for Sade Vigesa by Alarico de Castro as director of business development. (PB-24.) Mr. De Castro was later to serve as the P-31 Consortium's project manager for P-31. (Tr. at 2173-74.)

128. The P-31 bidding commission issued fifteen circular letters responding to requests from the parties for clarification of the bidding documents. The circulars were distributed to all interested parties and bidders. (JS ¶ 173.)

129. On August 24, 1995 seven consortia, made up of fourteen companies, submitted bids on the P-31 Project. (S-1136 ¶¶ 5.1, 5.2; S-291 at U 2434.)

130. In its report dated August 28, 1995, the bidding commission found that the P-31 Consortium was the low bidder. The P-31 Consortium bid was \$163,000,021. (S-1136 at 3.)

131. The P-31 Project was to be completed within 810 running days. The signing of the Contract was to be conditioned on the P-31 Consortium's obtaining a performance bond meeting the conditions set forth in the Invitation to Bid. (Id.; JS $\P\P$ 170, 182.)

132. The bidding contest for the award of the P-31 Contract was entirely transparent, fair, and above board. (Tr. at 3518-21.)

133. On August 25, 1995, Brasoil entered into a contract with a consortium made up of IVI and Sade Vigesa to convert the Cairu, a VLCC similar to the Vidal, to an FPSO called P-32. (S-1476.) That Consortium was the lowest bidder on the project with a contract price of \$93,000,710. (Id. at 10.)

134. IVI was also involved in constructing two other Petrobras/Brasoil projects known as P-25 and P-34. (JS ¶¶ 187, 189.) Despite serious concerns about the concentration of five significant projects with IVI (P-19, P-25, P-31, P-32, and P-34), Petrobras and Brasoil were required by Law 8.666 to award the projects to the lowest qualified bidder. (Tr. at 244-246, 3248.)

135. On October 25, 1995, the Sureties issued a Performance Bond for the P-31 Contract in the face amount of \$163,000,021, with Brasoil as the obligee. (JS ¶ 163.)

136. On October 25, 1995, the P-31 Consortium and Brasoil signed the P-31 Contract (Contract No. 846-2-024-95-1). The Service Authorization was issued the same day. An on-shore completion date of August 16, 1997 and a final contract completion date of January 11, 1998 were established. (JS ¶¶ 164, 167, 182.)

The P-31 Consortium Underbid the P-31 Project

137. The P-31 Consortium submitted a bid that seriously underestimated the reasonable costs that would be necessary to complete the project. The P-31 Consortium prepared a budget document prior to the bid that showed in detail two budgets with total prices of \$169.7 million and \$195 million. (PB-856; Tr. at 2243-44.) The budget document also notes a "floor" figure of \$161,250,292.50 and a "ceiling" figure of \$174,829,264.50, without detail. The P-31 Consortium staff initially recommended that the Consortium bid the project for \$169,000,000, but upper management reduced the bid to \$163,000,021 on the day the bid was submitted. (Tr. at 2244, 3808.) No factor for contingencies, overhead or profit was included even in the \$169 million proposal by the staff and therefore not in the still lower bid of \$163,000,021 determined by the Board. (Id. at 2247, 3814.)

138. David Fischel, president of IVI and Sade Vigesa, admitted that the P-31 Consortium counted on negotiating steep price discounts from suppliers once it had a contract in hand. (Id. at 1022, 2166).

139. The substantial underbid was exacerbated by market conditions that resulted in an increase in the cost of equipment as a rsult of an overheated market. Moreover, IVI's poor financial condition resulted in increased costs because of difficulties in obtaining favorable prices and credit facilities. Thus, while the P-31 Consortium expected to earn a profit based on its ability to negotiate better prices with suppliers, exactly the opposite result occurred. The P-31 Consortium itself acknowledged in November, 1996 and April, 1997 that there were substantial reasons for the increased cost of the P-31 Project that had nothing to do with any fault of Petrobras or Brasoil. The P-31 Consortium's stated reasons for the discrepancy between the budget and the actual costs include: (1) IVI's poor financial condition, resulting in lack of credit and lack of negotiating leverage with suppliers, (2) the fluctuation of the real against the dollar; (3) an increased demand for supplies, resulting in higher prices; (4) the Consortium's decision to purchase equipment on skids, which increased prices; and (5) the inability of some suppliers to comply with the Contract's technical specifications. (S-342; PB-217.)

140. The P31 overruns and delays were caused principally by the P-31 Consortium's own practices and by market forces that were not the fault of Petrobras or Brasoil. The principal reasons that the P-31

Consortium did not complete the P-31 Project within the Contract price were the following: (1) an unrealistically low bid that failed to provide for significant items and a heating up of the offshore market; (2) poor project planning; (3) IESA's delay in the issuance of construction drawings and material requisitions; (4) failure to manage suppliers; (5) delays in the manufacture and delivery of equipment; (6) deficient shipyard infrastructure; (7) labor strikes and inefficiency; and (8) damage to the turbocompressors. (Tr. at 4069-97.)

The Issuance of the P-31 Bond

141. The Co-Sureties issued a Performance Bond in New York in the penal sum of \$163,000,021, Bond Nos. 53-0120-56276-95-1 (USF & G) and 15-11-56 (AHAC), effective October 25, 1995 (the "P-31 Bond"). The "Contractor" named on the P-31 Bond was "Consorcio Industrias Verolme Ishibras SA. Sade Vigesa S.A." USF & G and AHAC each signed the Bond as "Sureties," and IVI and Sade Vigesa each signed it individually as "Contractor" and "Principal." (S-123 at 1, 3.) The P-31 Bond was issued in favor of Brasoil, as obligee. in connection with the P-31 Contract. (JS ¶¶ 193-94.).

142. Like the P-19 Bond, the P-31 Bond was on the AIA 312 form. The P-31 Bond included the same Clauses 1, 3, 4, and 8 discussed above with respect to the P-19 Bond. (S-123.)

143. As discussed above, there is no evidence that the Sureties actually reviewed the P-31 Contract before issuing the P-31 Bond.

144. By October, 1995, the financial situation of IVI had worsened, but the Sureties proceeded to issue the performance bond despite that financial condition. (Tr. at 4433-34.) In addition, IVI was working on 5 Brasoil projects simultaneously (P-19, P-25, P-31, P-32, P-34), and in September, 1995, USF & G had issued a bond for the P-32 (Cairu) Project in the amount of \$93 million. (Id. at 511-12; JS ¶ 188.)

Relevant Terms of the P-31 Contract

145. The P-31 Contract was an engineering, procurement, and construction contract ("EPC Contract") to be performed on a turn key, lump sum basis. As set forth in Section 1.1. of the P-31 Contract, the object

of the Contract was the performance by the contractor of the services and procurement necessary to convert the VLCC Vidal de Negreiros into a floating production, storage and offloading unit ("FPSO") for oil and gas. (PB-820 at 489.)

146. The Contract was to be completed within 810 days of Brasoil's issuance of a Service Authorization (660 onshore, 60 for pre-operation of the oil and gas systems offshore, and 90 days for provision of support for the assisted operation phase). (Id. at 506.) The completion date for the onshore work was initially scheduled for August 16, 1997, with an offshore completion date of January 11, 1998. (Id. at 506, 518.) The parties subsequently agreed in Amendment Three to extend the Contract duration by ninety-three days. (Id. at 1557-58.) The deadline for completion of the onshore services was moved back to November 17, 1997, and the offshore phase was moved back to April 14, 1998. (Id.; JS ¶ 167.)

147. The P-31 Consortium's total price of 163,000,021 was compiled from five schedules consisting of fixed prices and unit prices. (PB-820 at 880; JS ¶ 170.)

148. Annex VIII to the P-31 Contract provided for periodic progress payments in accordance with an intricate PBS. (PB-820 at 881-888.) The PBS provided measurement criteria for payment under the EAP based on the completion of specified activities (such as detailed engineering design and the procurement of equipment.) (Id at 883.) 51% of the lump sum amount on Schedule A was to be paid when procurement milestones were met for equipment and materials. (JS ¶ 178.) of this total for procurement, 40% (i.e., 20.5% of the overall schedule A price) was tied to the procurement of the turret system. (Id.) The turret system was a complex component which was to anchor the Vidal, provide a location for risers to be attached to the vessel from the oil and gas wells on the bottom of the ocean, and function as a pivot around which the vessel could change its orientation in the sea. (Tr. at 911-12, 3436.)

149. Under the P-31 Contract, the Consortium was to invoice Brasoil by submitting a Measurement Bulletin ("BM") which outlined in full detail the services that had been performed the prior month and calculated the percentages that were due under the EAP system. (PB-820 at 505-06.) Petrobras would confirm that the services had been performed, and approve the BM for payment. Petrobras and the P-31 Consortium would often negotiate whether the Consortium was entitled to payment for having achieved a given benchmark.

150. Section 3.15 of the Contract required the Consortium to endorse the technical consistency of the Basic Engineering Design documents supplied by Brasoil within sixty days from the commencement date of the services under the Contract. (PB-820 at 496 § 3.15.) Thereafter, there could be no grounds for subsequent claims in relation to the inadequacy or lack of precision of the Basic Engineering Design documents. (Id.) The P-31 Consortium issued a Basic Design Consistency Analysis-Vidal Project: letter report on December 28, 1995. (PB-268.)

151. The P-31 Consortium was responsible for retaining a classification society to inspect and certify the platform. (PB-820 at 489.) The P-31 Consortium hired the American Bureau of Shipping ("ABS") as the classification society for the vessel. (Tr. at 4145.) All work on the vessel had to be approved by ABS. (JS ¶ 180.)

152. Appendix V to P-31 Contract Annex III included a detailed vendor list with the names of approved suppliers for each item of equipment. (PB-820 at 622-64.) Brasoil was obligated to accept equipment made by these vendors that met the specifications set forth in the Contract. (JS ¶ 181.)

153. Brasoil had the contractual right to participate in technical discussions with vendors and to accompany the P-31 Consortium on expediting visits and inspections. (PB-820 at 591-93 §§ 3.14, 4.3, 5.5; Tr. at 1017.)

154. If the work fell behind schedule due to the fault of the contractor, Brasoil had the right to demand that the contractor employ a larger work force, work overtime, and/or provide additional tools and equipment to the extent necessary to eliminate the delay and permit the work to be completed on the specified date without any alteration of the Contract prices. (PB-820 at 507 § 8.3.)

155. Appendix I to P-31 Contract Annex VIII, entitled "Procedures of Equipment Repair," set forth detailed "as new" procedures for the equipment to be retained on the Vidal and reconditioned. (Id. at 899-985.) The object of the reconditioning was to "recover the original working conditions (similar to a new equipment) and allowing its use for the FPSO operational life-time" of twenty years. (Id. at 900 § 1.)

156. Under the P-31 Contract, only the project managers were allowed to issue correspondence in the name of their respective companies and "all verbal communications, whenever necessary, shall be confirmed later by letter or meeting notes." (Id. at 556-57 §§ 2.2, 3.1.)

157. Weekly meetings were to be held between Brasoil and the P-31 Consortium to discuss technical and administrative matters. (Id. at 557 § 4.1.) All the subjects discussed in the engineering meetings "shall be formalized by meeting notices, issued immediately at the end of each meeting." (Id. § 4.2.)

158. Like the P-19 platform, the P-31 was expected to be stationed approximately one hour's flight offshore for twenty years. ("Tr. at 2947, 2980.) There would be no opportunity to remove the unit to shipyards on shore for repair and refit. (Id. at 3109-10.) It had to be capable of operating twenty-four hours a day, seven days a week in a harsh marine environment. Thus, the P-31 Contract required rigorous compliance with technical and safety specifications. (PB-820.)

159. The Contract conferred broad rights on Petrobras to supervise and inspect the progress and quality of the work. (Id. at 506-08 § 8.) Annex VII required the P-31 Consortium to provide facilities for the Brasoil inspection team (Id. at 846-50), which it envisioned would consist of between fifteen and thirty people at the job site (Id. at 848). An additional six inspectors were to be stationed at the engineering office. (Id. at 847.)

160. Brasoil did not have the right to terminate the P-31 Contract for convenience. (Tr. at 1040.)

Initial Efforts to Address the Consortia's Cash Flow Problems

161. As of early November, 1995, the P-19 Consortium was having difficulty paying for essential supplies and services for the P-19 Contract. Suppliers, including the classification society, were threatening to curtail services to the P-19 Project unless payments were made. (PB-957.)

162. On November 14, 1995 Guilherme Pires, on behalf of the P-19 Consortium, wrote to Paulo Marcio Mauro of Petrobras requesting that the schedule for progress payments for the P-19 Project be changed. Mr. Pires claimed that the working capital of the consortium had been depleted by the need to arrange gap financing for the difference between the amount allocated in the Contract for the purchase of the platform (25% of the contract price) and the \$55 million that the Consortium paid for the Treasure Stawinner. (S-127.)

163. On December 6, 1995, Sade Vigesa President David Fischel met with the Diretoria of Petrobras to explain the cash flow problems facing the P-19 and P-31 Consortia and to seek financial assistance from Petrobras. In a letter written the same day, Dr. Fischel confirmed the substance of his discussion with the directors. (S-136.)

164. Dr. Fischel admitted that IVI was suffering from negative financial influences common to the naval construction industry in Brazil including high costs resulting from labor disputes, losses from changes to the foreign exchange rate, and excessive personnel as a result of job stability agreements entered into in the past. (Id. at 1.) To resolve these problems, IVI had decided to undertake a drastic restructuring. This restructuring would involve: (1) transforming the company into small business units; (2) tailoring current staffing to actual project needs; (3) negotiating with workers to produce a stable and economical work relationship; (4) negotiating and rescheduling commitments with suppliers; (5) concentrating offshore work at the Verolme shipyard; and (6) suspending new naval construction contracts until all the above mentioned measures were implemented and consolidated. (Id. at 2.) To achieve these objectives, Dr. Fischel asked Petrobras for an advance of \$15 million to be repaid in five equal installments. He further proposed that the Consortia would establish separate bank accounts for the projects and account to Petrobras every month on the origin and investment of funds in the account. (Id.)

165. On December 20, 1995, Alceu Barroso Lima Neto, the head of Petrobras' engineering department ("SEGEN"), sent an internal memorandum to Petrobras director Sebastiào Vilarinho in which Mr. Alceu discussed the requests made by David Fischel and recommended various initiatives to resolve the problems caused by the concentration of projects with IVI and IVI's recurrent financial problems. (S-154A.) He observed that there was no guarantee that a loan of \$15 million to IVI would resolve the IVI group's financial problems. Mr. Alceu proposed that Petrobras establish blocked accounts ("contas vinculadas") similar to those used in the construction of ships to guarantee that resources related to the projects would be used for the jobs. He also observed that it would be better if the Petrobras/Brasoil projects that had been awarded to IVI but had not yet commenced — the P-32 (Cairu) and the P-31 (Vidal) — be transferred to other contractors. Mr. Alceu recommended that the termination of these contracts be negotiated with IVI with the prospect of financial support and the implementation of the blocked accounts as the incentive.

166. Mr. Vilarinho met with Nelson Tanure several times in December, 1995. Mr. Tanure agreed to relinquish the P-32 Project in exchange for Petrobras adjusting the EAPs of the P-19, P-31, and P-34 Contracts to ease the contractual cash flow problems of IVI and Sade Vigesa. The parties also agreed to establish blocked accounts so that funds paid to the Consortia would be used solely to complete the Petrobras projects. (Id. at 465-66; 3252-55.)

167. Mr. Tanure refused to relinquish the P-31 Project, and told Mr. Vilarinho that he needed P-31 to complete P-19 and P-34. (Id. at 184, 194, 197, 3255.)

168. The Sureties have argued repeatedly that the Petrobras Diretoria made a secret decision in December, 1995 or January, 1996 to continue to fund the P-19 and the P-31 Consortia to completion of the Projects, regardless of the costs of the Projects, and not to declare a default on the Projects or to notify the Sureties of a default. (Sureties' Proposed Findings of Fact ¶¶ 31-41(f).) The Sureties claim that the Diretoria made the alleged decision because Petrobras understood that declaring a default or changing contractors could seriously delay completion of the Projects, thereby causing a loss of revenues due to delayed oil and gas production. In support of this theory, the Sureties rely primarily on Mr. Vilarinho's deposition testimony. (Tr. at 210-19.) The Sureties also argue that the consequence of this decision was that Petrobras ran the Projects like cost plus contracts, rather than lump sum contracts, and that there was no cost discipline. Therefore, according to the Sureties should be released from their obligation. The Sureties rely heavily on the testimony of their engineering and construction expert, Theodore Trauner, with respect to the alleged change in the nature of the contracts. (Id. at 2458-67, 2470-74.)

169. As discussed in greater detail below, having considered all of the evidence, including the contemporaneous documents and the evidence of the way in which the Projects were actually funded and administered, and having assessed Mr. Vilarinho's credibility, the Court finds that there was no decision (secret or otherwise) to fund the P-19 and P-31 Consortia to completion irrespective of the costs of the Projects. (Id. at 214-15, 218-19, 3256, 3268.)

170. Moreover, in December, 1995 and January, 1996 there was no legal basis to declare a default on the P-19 and P-31 Projects and the Sureties have pointed to none. Neither the P-19 nor the P-31 Projects could simply be taken away from the respective Consortia, and when Mr. Vilarinho proposed to Mr. Tanure that IVI give up the P-31 Project that proposal was flatly rejected. The Sureties' argument is also thoroughly inconsistent with its position that a year and a half later, when Brasoil declared the P-19 and P-31 Consortia to be in default of their contractual obligations, the Consortia were not in fact in default. Mr. Trauner's testimony was not credible on the subject of the administration of the contracts as cost plus contracts. His credibility was further undermined by his purportedly expert testimony as to the existence of a "secret decision," an opinion that his engineering and construction expertise did not qualify him to give and which was based in part on the opening statement of the Sureties' counsel. (Id. at 2460-61, 2761.) Further, the history of the careful way in which the contracts were administered, with the negotiation of specific changes, undercuts any argument that the contracts were being administered

as cost plus contracts. Finally, when it was subsequently proposed that the contracts be transferred to another company and turned into cost plus contracts, Mr. Vilarinho flatly rejected the proposal. (Id. at 959, 982, 1252, 3278.)

171. It is plain that the senior management of Petrobras discussed in December, 1995 and January, 1996 what to do about the IVI situation in view of the requests for assistance. However, the results of those discussions were the approval of the blocked accounts to assure that funds were being paid for proper purposes on the Projects, a modification of the EAP schedule to allow greater funds to be provided to the Consortia at an earlier point in time, and the request for IVI to yield the P-31 and P-32 contracts. (Id. at 3254-56.) These proposals were adopted, except for the transfer of the P-31 Project, which was rejected by Mr. Tanure. Id. at 3255.

172. The actions by the Petrobras Diretoria did result in the continuation of the P-19 and P-31 Projects with their respective Consortia, but this did not mean that the Petrobras would not declare a default when there was a default to be declared. The Diretoria followed a strategy to "follow up these projects on a daily basis, and seek to adapt its decisions in accordance with what was happening." (Tr. at 214.) In response to a question by the Court at trial, Mr. Vilarinho testified credibly that in December 1995, he "could say that the prevailing idea, based on what we saw in the progress of the projects and the difficulties involved in taking the ships to other countries and loss of time, and the financial impacts of any such action, that we would work with the situation until it became unworkable. That was not so much a decision, but rather an evaluation of the situation." (Tr. at 3268.) Mr. Vilarinho also testified credibly that in January, 1996,

the default was beginning to become a concern for the board of directors of Petrobras, based on our experience with the Brazilian naval construction industry. The matter, or the subject, was talked about frequently.

In the specific case, or in the specific period of January of 1996, however, the idea did not go forward because there remained a lot of money in the contractual accounts, and the progress on the construction of the platforms, despite the difficulties that the shipyard was having with the unions, was going well, and the delays were very small.

So Petrobras could not make that decision independently on the default because there remained a lot of money in the contracts and the construction was going reasonably well.

(Tr. at 3256.)

173. The Consortia were in compliance with the P-19 and P-31 Contracts in December, 1995. (Id. at 508-09, 3532-33.) Petrobras/Brasoil had no legal basis to terminate the contracts unilaterally because the contracts were on time and there were balances owed to the Consortia under the contracts. (Id. at 3256.) David Fischel testified candidly that he would not agree that the Consortium would give up the P-31 Contract. (Id. at 1040.) If Petrobras/Brasoil had sought to terminate the P-31 contract at that point, the P-31 Consortium would have brought a lawsuit. (Id. at 191-92.) Indeed, the Sureties concede that "it is not clear that in December 1995 or January 1996, Brasoil had a clear legal right to declare a default and terminate the contracts of one or both of the Consortia." (Sureties' Proposed Findings of Fact ¶ 31(b).)

174. On or about January 9, 1996, IVI provided Brasoil with a cash flow schedule indicating that by December, 1997 the Consortia would incur a loss of approximately \$61 million in connection with the P-19, P-31, and P-34 Projects. (S-157; Tr. at 3536-37.) Mr. Alceu recommended to a Petrobras director that Petrobras agree to changes to the EAPs for the three Projects in order to provide the Consortia with approximately \$32 million in payments that would otherwise not be due until a later date. (S-157 ¶ 7.) The changes in the EAPs of the three contracts would recognize the additional \$14.25 million spent by the Consortia for the Treasure Stawinner; provide a payment in connection with the turret order for the Vidal de Negreiros, and return a retention on the P-34 Project. (Id.)

175. On January 29, 1996, the heads of Petrobras's engineering and financial departments sent an internal memorandum informing the Diretoria of the Consortia's cash flow problems and its projected deficit of \$60 million by October 1997. (S-165 \P 6.2.) The memorandum recommended that the EAPs of the three projects be adjusted to ease the Consortia's cash flow problems and that blocked accounts be instituted to control the application of funds. (Id. $\P\P$ 14.1-14.4; Tr. at 3256.)

Changes to the EAP and the Establishment of Blocked Accounts in the First Amendments

176. On February 12, 1996 Brasoil and the P-31 Consortium executed Amendment One to the P-31 Contract, which revised the P-31 EAP so that the Consortium would receive larger payments when the purchase orders were placed for the turret and turbocompressors. The payments for documentation were also increased from two to four percent of the schedule A price. In addition, Amendment One established the system of blocked accounts ("contas vinculadas") for payment of project expenses. (PB-820 at 1510-25.)

177. David Fischel testified that the first amendment to the P-31 Contract required the Consortium to perform the Contract at the original price and in accordance with the original terms. (Tr. at 1033.) P-31 Amendment One only changed the Contract by altering the EAP schedule and establishing the blocked accounts. All the other conditions of the P-19 contract remained unchanged. (PB-820 at 1515 § 9.1.)

178. On March 1, 1996, Brasoil and the P-19 Consortium entered into Amendment One to the P-19 Contract, which revised the P-19 EAP to increase the payment to the P-19 Consortium for the purchase and delivery of the existing vessel from 25% to 35% of the Contract value; reduced the amounts to be paid for construction and assembly, sea trials and start-up assistance; and established a blocked account system. (PB-71.)

179. Although it was not necessary to do so, Petrobras's P-19 project manager, David Schmidt, asked the P-19 Consortium's project manager, Mr. Pires, to send a copy of Amendment No. 1 to the P-19 Contract to the Sureties. (Tr. at 3376.) When the Consortium did not respond in a timely fashion, Mr. Schmidt asked again. (Id.) On or shortly after April 16, 1996, Mr. Schmidt received a copy of a letter indicating that the Consortium had sent the amendment to Tudor Marsh & MacLennan, the Brazilian arm of its broker Marsh & MacLennan, and asked Tudor Marsh & MacLennan to forward the amendment to the Sureties. (PB-78.)

180. The first amendment to the P-19 and P-31 Contracts made it clear that the establishment of blocked accounts for the projects did not represent a commitment by Brasoil as to the final cost of the

performance of the Contracts, but only a means of monitoring the expenditure of funds earned by the Consortia. (PB-71 at 4 § 17.1.12; PB-820 at 1514 § 23.1.12.)

181. IVI had previously used blocked accounts for its naval contracts. (Tr. at 510-511.)

182. Blocked accounts with joint signatory powers are commonly used by Sureties in connection with troubled projects. (Tr. at 1387, 3797.)

183. The blocked account system that the Petrobras Defendants agreed on with the Consortia worked as follows. IVI would submit bank payment orders ("OPBs") to Petrobras for approval with supporting documentation five days prior to the time the funds were needed. Petrobras would then determine whether the costs were contract related and, if so, approve the expenditures. The Petrobras Defendants only had the right to remove items which were not within the scope of the three Contracts (the P-19, P-31 and P-34 Contracts). (PB-71 at 2-4; PB-820 at 1512-14.)

184. If there were a surplus remaining in the P-19 blocked account after the P-19 Contract was completed and the instrument of final receipt signed, the balance of the P-19 blocked account would be transferred to the P-31 blocked account. (PB-71 at 2 § 17.1.2.) At the end of the P-31 Project, any balance left in the P-31 blocked account would be released to the P-31 Consortium. (PB-820 at 1512 § 23.1.2.)

185. On April 2, 1996, the parties agreed on a "Procedure for Release of Funds from the [Blocked] Account[s]" ("the Procedure"). (PB-76.) The Procedure specified that positive balances from one blocked account could be used to pay expenses of the other two projects, but that the transfer from the original account would have to be restored as soon as there was a positive balance in the blocked account of the project receiving the transfer. (Id. § 2(ii)-(iii).)

186. IVI, not Petrobras, decided whether to use the balance in one of the blocked accounts to pay the expenses for another project. (Tr. at 3699-3700.)

187. There was no improper commingling of project funds. Each project had its own set of blocked accounts, an internal account and a domestic account. Careful records were kept of the expenditures on each project. (Id. at 3844-46, 3850-51.)

188. The P-19 blocked accounts had received approximately \$5 million net from the P-31 Project as of May 12, 1997, the date the default was declared on the P-19 Contract. (Tr. at 3846, 3850.)

189. Approximately \$6 million had been transferred out of the P-31 account to the P-19 and P-34 accounts as of June 16, 1997. The account balance for the P-31 Project, however, had been replenished by various other transfers so that, on a cost basis, Brasoil had paid in excess of the adjusted contract balance of the P-31 Contract by June 16, 1997, when a default was declared on that contract. (PB-1302; Tr. at 3846, 3850, 3859-60.)

190. Frederick Hamilton, the damages expert for the Petrobras Defendants, confirmed that the adjusted contract balance of the P-31 Contract had been exhausted on a cost basis prior to the June 16, 1997 default. (Tr. at 3859-60; PB-1302.)

191. Until April, 1997, the funds in the blocked accounts represented the proceeds of progress payments made pursuant to the BMS system to the Consortia. The money in the accounts had been earned by the Consortia and belonged to the Consortia. (Tr. at 1744, 1746, 3617.) Without the blocked accounts, the Consortia would have been free to use the BMS payments for any purpose whether or not related to the Brasoil contracts. (Id. at 417-18.)

192. The Procedure also provided for the establishment of rotating funds ("rotativos") for each Contract to be used to pay petty cash expenses. The Consortia was obligated to submit proof of the expenditures made from the rotating fund during the prior month before Brasoil would replenish the funds in the rotating account. . . . The Petrobras Defendants kept careful track of the expenditures made through the rotating accounts. (Id. at 1696-99, 3212-13.)

193. On April 25, 1996 Brasoil and the P-31 Consortium entered into Amendment Two to the P-31 Contract, which adjusted the P-31 EAP to provide approximately \$4 million in immediate funds so that the Verolme Shipyard could pay severance payments to laid-off workers. (PB-820 at 1541-45.)

194. While the revisions to the P-31 EAP in Amendments One and Two resulted in greater cash flow to the P-31 Consortium early in the project, the advances began to be recaptured through progress

payments that were lower than the original EAP beginning with BMS 9 in May, 1996. (Tr. at 2371; PB-1423 at 6; PB-1302.)

195. On March 20, 1996, Carlos Maurico, the Vice President of Sade Vigesa and the offshore director for the Consortia, wrote Petrobras director Vilarinho to explain the factors that were influencing the development of the P-19 conversion. (S-193.) He admitted that the project was "extremely chaotic" from its outset through July, 1995. He pointed out that in that beginning period, management time was spent obtaining the performance bond, financing the purchase of the Treasure Stawinner and purchasing major equipment. After replanning the project in September, 1995 to take into account changes to the basic design agreed to with the Petrobras Defendants, IVI entered its "most tense and chaotic" phase in November, 1995. IVI, the lead member of the P-19 Consortium, experienced strikes, paralysis, internal problems, impairments in the shipbuilding contracts, lack of credit and working capital which took IVI to "production stagnation": no planning, purchases, or construction took place, with direct consequences for the P-19 Project. Nevertheless, Mauricio indicated that the Consortium was proceeding on a timetable that retained the same final deadline for delivery of the platform. (Id.)

196. Mr. Mauricio complained that IVI was subjected to negative news articles causing great insecurity within Petrobras, and with suppliers, credit institutions, and subcontractors-"in fact, the entire community" with which the project management had to deal. Mr. Mauricio also admitted that the management of IVI had been preoccupied dealing with the company's global problems, detracting from dealing with solutions of matters specific to P-19. (Id.) He stated that the Consortium felt that it was important for Petrobras to show that it was involved in the project and that "[i]t is a difficult mission, but it is possible provided that the Consortium and Petrobras act, and are seen as, a single entity." (Id.)

197. For purposes of its theory that Petrobras was really a partner of the Consortia, the Sureties place great weight on Mr. Mauricio's statement regarding Petrobras and the Consortium acting as a single entity. However, this plea by a representative of the P-19 Consortium, which acknowledges the problems that the Consortium had and looks for assistance, does not show that Petrobras was in partnership with the Consortium. In fact, the full context of the relations among the parties shows that Petrobras was not a partner of the Consortium. Petrobras was acting as a supervisor for Brasoil pursuant to its agreement with Brasoil and the Consortium was the construction contractor on the project. Moreover, this plea by Carlos Mauricio is inconsistent with another theory of the Sureties, namely that Petrobras was in fact dominating the Consortium. Mr. Mauricio's March, 1996 letter shows that well into the P-19 Project, the representative of the P-19 Consortium was asking for the assistance of Petrobras — a request that would be pointless if Petrobras were already dominating the Consortium.

Comfort Letters and Direct Payments for Equipment

198. At the urging of suppliers who, concerned about IVI and Sade's financial condition, were demanding letters of credit and other financial guarantees, the Petrobras Defendants issued so-called "comfort letters" to suppliers beginning in or about March, 1996. (Tr. at 1612; S-291 at U2444.) The comfort letters took various forms. The early comfort letters merely informed the suppliers that Brasoil and the Consortia had established blocked accounts for funds paid to the Consortia and that Brasoil would ensure that suppliers were paid from the blocked accounts. Later, Brasoil promised specific suppliers that it would pay for designated equipment if the Consortia's members sought bankruptcy protection or failed to pay for the equipment after it had been delivered (See, e.g., S-344.)

199. The Comfort Letters did not increase the Sureties' risk. They served to obtain shipment of equipment for the projects, furthering their progress and reducing the amount that the Sureties might be called upon to pay or perform if a default were declared under the Contracts.

200. Section 3.44 of the P-31 Contract required the Consortium to place the purchase order for the turret system and turbocompressors within sixty days from October 25, 1995, the date of commencement of service. (PB-820 at 500 § 3.44; Tr. at 2998.) The deadline for the placement of these orders was therefore December 25, 1995.

201. The P-31 Consortium did not have the internal resources to pay for the Vidal turret and turbocompressors and was unable to arrange outside financing. (Tr. at 3554-55; S-291 at U2445.) The Consortium did not issue a purchase order for the turret until February 2, 1996, 39 days after the deadline specified in the Contract. (Tr. at 4166-67.)

202. On May 16, 1996, Mr. Quintella, the deputy head of SEGEN, sent a memo to Mr. Vilarinho informing him that the measures taken to support the P-19 and P-31 Consortia through the changes to the EAPs were not sufficient and that the Consortia would not achieve the financial stability required for the normal development of the projects. (S-247.) He also reported that the Consortia were unable to find external financing for the equipment and that IVI had been unable to implement its plan to reduce its workforce. In as much as a tacit decision had been made to continue with the Consortia, solutions had to be found for their financial problems. The only way to continue the projects was to make payment in advance of the progress payments. Mr. Quintella recommended that Petrobras make direct

payments to major equipment suppliers in the amount of \$43,750,000, with these advances to be deducted from future progress payments beginning in December. The payments would permit work to continue and would provide time for a solution to be found to the financial problems facing the Contracts. (Tr. at 3258-59, 3265; S-247.)

203. Mr. Quintella advised the Diretoria that the projected overrun on the three contracts had escalated from \$60 million, when the prior amendments were signed, to approximately \$89 million. These estimates were provided by the Consortia. (S-247 ¶ 17; Tr. at 3271, 3548; S-291 at 2446.)

204. Mr. Quintella indicated that one possible solution for the overrun was for IVI and its partners to assume it as a debt. (S-247 ¶ 18.) Mr. Quintella also recommended that the Sureties be consulted and asked to provide their suggestions. (Tr. at 3262; S-247 ¶ 18.1.)

205. On May 23, 1996, the Diretoria approved the recommendations set forth in Mr. Quintella's May 16, 1996 memorandum to Mr. Vilarinho. (Tr. at 541-42; S-256A.) The Petrobras Diretoria did not take any final decision with respect to the continuation of the projects with the Consortia. (Tr. at 205, 207.)

206. Petrobras/Brasoil could not unilaterally terminate the contracts under Law 8.666 because the projects were more or less on schedule and there remained a balance yet to be paid on the contracts. If Petrobras/Brasoil had tried to terminate the contracts, the Consortia would have been able to obtain injunctions from a Brazilian court to stop construction. (Id. it 3265-66.)

207. In May, 1996, continuing with the Consortia was the cheapest alternative available to complete the projects. (Id. at 205.) There was no other yard in Brazil that had the facilities to convert P-19 and P-31. (Id. at 4292-93.) Similarly, there were no other companies in Brazil that could be brought in to complete the Projects even assuming that IVI would permit the continued use of its yards. (Id. at 4359-60.) The time involved in moving the Projects to any other yards in the world that could have completed the Projects, even if they could be hired to complete the work, would have been prohibitive. (Id. at 4292-4301.) It would also have been physically very difficult to move the vessels in view of their state of disassembly. (Id. at 4304-06.)

208. The decision to make the \$43.75 million in direct payments deferred the point where the Consortia would incur a net cash flow deficit from May, 1996 to June, 1997, notwithstanding the fact that the Consortia would have to repay the advances from the BMS payments beginning in December, 1996. (Tr. at 3548-49; S-291 at U2446, U2448.)

209. During the period from July, 1996 to February, 1997, Brasoil made direct payments totaling \$25,265,499 for the P-31 turret, turbocompressors, and other equipment. (S-514A at 3.)

210. During the period from June, 1996 to January, 1997, Brasoil made direct payments of \$17,660,500 for the P-19 vessel, turbo compressors, turbogenerators and other equipment. (Id.)

211. The Consortia requested the direct payments for P-19 and P-31 in a series of letters co-signed by Carlos Mauricio and Paulo Maninho (see, e.g., S-283; S-285; S-296; S-308; S-315; S-379; S-407; S-416; S-470.) These letters are captioned "advance and direct payment" and they refer to the number of the contract. The letters further provide that the advances and direct payments were being made without a BMS invoice, and that, together with interest, the payments would be discounted from future BMS payments beginning with the December, 1996 BMS payment. All of the direct payments were specifically designated for equipment required to complete the Projects. Thus, all the direct payments and advances are related to and are valid and proper payments under the P-19 and/or P-31 Contracts.

212. The provisions of the letters are consistent with Mr. Vilarinho's testimony that the Board decided to make the direct payments to suppliers in the approximate amount of \$43 million and to debit these payments from the contract value. (Tr. at 3265.) Similarly, Mr. Quintella testified that the direct payments were made from the contract balances but independently of the monthly contract measurements. (Id. at 543.)

213. David Fischel and the Consortia also considered the direct payments made by Brasoil to be valid charges against the respective contract balances. In a letter dated February 18, 1997 to Mr. Alceu, Dr. Fischel stated that the contract balances were exhausted. (S-455.) The contract balances would only have been exhausted at that point if the direct payments were considered deductions from the contract balances.

214. Brasoil was the source of all the direct and advance payments (with the exception of \$11.8 million in direct payments made by Petrobras for P-19). (Tr. at 1781, 1783, 3750-51, 3768, 3804-05.) Brasoil, in

turn, borrowed the funds for the direct and advance payments from Petrobras. (Id. at 3751.) The intercompany indebtedness was reflected on the books and records of both Brasoil and Petrobras in a "mutuo" account. Interest was charged on the balances in the mutuo accounts in accordance with Brazilian law. The audited financial statements of Brasoil showed the inter company transaction. (Id. at 3748-3750, 3758.) Petrobras could require Brasoil to repay the balance of the mutuo account on demand. The \$11.8 million direct payment made by Petrobras was recorded as a debit to Brasoil on the mutuo account between Brasoil and Petrobras. (Id. at 3804.)

215. The direct payments are appropriately considered payments pursuant to the contracts that reduced the amounts otherwise owed to the Consortia under the contracts. All of the direct payments and advances were made pursuant to documents that reflected that they were payments for the contracts and would be deducted from future amounts owned under the contracts.

216. The financial situation of the Consortia continued to worsen. In December, 1996 the Consortia requested, and the Petrobras Diretoria approved, a further advance of \$15 million for essential equipment for P-31 and \$16 million for P-19. (S-370 ¶ 24.) The payments were made to acquire equipment that was essential to the completion of the Projects. (Id. ¶¶ 13, 21.) In addition, the Diretoria decided to suspend the discounting of the direct payments from the December BMS payments until Petrobras analyzed the alternatives that might permit the contracts to continue and a formal position was obtained from the Sureties. (S-370 ¶ 25.2, 25.3.3.)

IVI and the Petrobras Defendants Kept the Sureties Fully In formed of the Developing Crisis

217. In the early part of 1996, USF & G became aware of certain financial problems that IVI was encountering because of information that USF & G received in connection with the P-34 Project. Astano SA ("Astano") was the contractor and IVI was a subcontractor on that Project. USF & G, on behalf of IVI as principal, had issued a performance bond for the P-34 Project in favor of Astano as obligee. (JS ¶ 283.) On December 14, 1995, Astano complained to IVI about the delays to the P-34 Project caused by strikes and threatened to start the process that would lead to a claim on the performance bond issued by USF & G. (PB-407.) USF & G was also sent a copy of this letter, and was thereby notified about IVI's problems with strikes, its difficulties in completing its work, and the possibility that a claim would be made on the P-34 bond. (Id.)

218. In a January 11, 1996 memorandum following a telephone conference among Eduardo Sattamini of IVI, Messrs. Buono and Bazaar of USF & G, and James Holland of Marsh McLennan, USF & G demanded financial information on all of IVI's on-going projects and payments to suppliers, including advances from Petrobras. (PB-56.) While the focus of this memorandum was plainly on the P-34 Project, it is clear that by mid-January, 1996, the Sureties were aware of IVI's financial difficulties.

219. Moreover, Nelson Tanure informed Mr. Buono on or about February 1, 1996 that Petrobras had agreed to make additional funds available to IVI and that all future progress payments would be deposited in blocked accounts to ensure payment of subcontractors and suppliers. (S-167.) USF & G was also informed that IVI had agreed to give up the P-32 contract. (Id.) It is plain that USF & G was aware of the financial difficulties IVI was having and its efforts to minimize that knowledge now are not credible. (See, e.g., Tr. at 1386-87.)

220. In an e-mail dated February 1, 1996 to Scott Williams, Mr. Buono noted that "all future progress payments will be disbursed by Petrobras into an escrow account for the purpose of paying subcontractors and suppliers." (S-167.) Mr. Williams forwarded Mr. Buono's e-mail to Gary Wilson, the head of USF & G's claims department, with the comment: "The IVI situation is fully resolved and we do not anticipate any further issues with the Ishibras contract." He saw no reason for Mr. Wilson to attend a meeting with Mr. Tanure in mid-February. (Id.)

221. On May 28, 1996, the Sureties met in New York with Carlos Mauricio of IVI and Ronald Carvalho da Silva, a director of a related company, to discuss all the Brasoil contracts and IVI's financial situation. (PB-410.) The Sureties were informed, among other things, that Petrobras was making direct payments for equipment and was making payments to Marubeni. (Id.) They were also informed that IVI was consulting Banco Fator, a Brazilian investment bank, with regard to a possible restructuring or reorganization. (Id.) Messrs. Mauricio and da Silva were optimistic that the restructuring of IVI would be successful and that all on-going contracts would be "successfully completed with no claims made by Petrobras against the Sureties." (Id. at 3.) IVI agreed to keep the Sureties updated monthly, or as needed. Mr. Bazaar observed in closing that "USF & G will monitor this on-going situation closely." (Id.)

222. In a separate memorandum of this same meeting, the Sureties noted that IVI had been suffering financial difficulties since October 1995 and had approached Petrobras for assistance in finding a solution that would allow IVI to continue work on the projects rather than being forced into bankruptcy. (PB-20.) It was noted that blocked accounts had been put into place to regulate the flow of funds for the P-19, P-31 and P-34 projects, and that Petrobras was making direct payments to offshore suppliers to

ensure timely payments. This was viewed as a "positive sign" because it would encourage continued progress of the on-going work. It is significant that there is no contemporary evidence that the Sureties viewed the actions of Petrobras in assisting IVI to meet the Consortia's contractual commitments by, among means, making advances and establishing blocked accounts as inconsistent with any obligations under the Performance Bonds.

223. By May, 1996, both the Sureties and the Petrobras Defendants began to strategize how they could preserve their rights against each other. There was extensive discussion at Petrobras about how best to approach the Sureties. (S-236A; S-239A; S-241; S-242A.) It was in the Sureties' interest not to interfere with the continued performance of the Contracts. The more work that was accomplished on the Projects, the less that remained to be bonded. It was in the Petrobras Defendants' interest to assure that the Sureties were put on notice of difficulties with the Contracts to assist in making any future claims. (S-237A.)

224. On June 5, 1996, Astano notified USF & G that it was calling a 3.1 Meeting under the P-34 performance bond, which it was required to do before declaring a contract default and triggering USF & G's obligation under that bond. (S-268.) Astano suggested that the Meeting be held in Brazil on June 25-26. (Id.)

225. On June 16, 1996, Mr. Quintella wrote to USF & G, asking to meet with representatives of USF & G when they were in Brazil for the Astano 3.1 Meeting. (S-275.)

226. On July 18, 1996, Petrobras gave a full and complete briefing to USF & G concerning the condition of the projects and the Consortia's financial problems. (S-291.) The Sureties were asked to propose solutions that would enable the projects to be completed. (Tr. at 1052-53; 3556-57.) While Petrobras emphasizes this request, there is no explanation why the Sureties had any obligation to propose any solution to IVI's financial situation before any default had been declared on the Bonds and the obligations of the Sureties invoked under the Bonds. While it might have been in the Sureties' financial interest to see that the contracts could be performed without the need to call on the Performance Bonds, there is no explanation why they had any legal obligation to do so.

227. During one of the July 18, 1996 meetings, Petrobras gave USF & G full details concerning the direct payments Petrobras was making to equipment suppliers and IVI's financial projection that the projects

would result in an \$89 million cost overrun. Mr. Wilson eventually testified that USF & G was fully informed about the direct payments and did not object to them or tell Petrobras to stop making them. (S-291; Tr. at 1444-47.) David Fished testified credibly that following his July 1996 meeting with Mr. Wilson, he kept Mr. Wilson informed of the deficit projections on the projects and the reasons for them. (Tr. at 1049.)

228. Beginning after the July, 1996 meeting and continuing through December, 1996, Petrobras and the Sureties, with the Sureties being assisted by IVI, exchanged a series of self-serving, posturing letters as to whether the Sureties would come up with any solution to the problems of the Consortia. (See, e.g., S-314; S-1268; S-319; S-335; S-363.) However, the Sureties avoided telling Petrobras to stop making direct payments to equipment suppliers or that such payments were in violation of any contracts. By doing so, the Sureties were able to see that the performance of the Contracts continued despite IVI's financial difficulties and any day of reckoning under the Bonds was postponed. The Sureties thus waived any objections to the direct payments and advances of which they had been informed.

Critical Problems at the end of 1996 and the Beginning of 1997

229. With the assistance of Mustang, its United States procurement agent, the P-19 Consortium negotiated very favorable terms with its U.S. vendors based on the existence of the credit facility insured by the Exim Bank. (PB-1018 at 4.) The vendors agreed to accept initial payments of 0-15% of the price of the equipment with the balance of 85-100% due upon delivery. (Id.) Under the PBS for the P-19 Contract, Brasoil paid the P-19 Consortium 20% of the EAP value of imported equipment when the purchase order was placed and an additional 30% when the drawings were certified. The remaining value of the equipment was to be paid when the equipment was delivered from the manufacturer (20%) and at the job site (30%). Thus, the P-19 Consortium received a float on U.S. equipment which should have been set aside for future payment of the equipment. (PB-279 at 595.)

230. Due to their failure to lock in prices, the unrealistic estimates in the bids, and the rise in demand for process equipment in 1995-1997, the Consortia were forced to contract for process equipment at prices far higher than budgeted for in the bid. (Tr. at 4078-88.) Moreover, the prices the Consortia had to pay for equipment greatly exceeded the payments they would receive as specified in the EAP. The EAP payments were calculated on the basis of a percentage of the Contract price, not the prices actually paid for equipment in the marketplace. (PB-279 at 589, 592-96; PB-820 at 882-83, 885-88.)

231. On or about March 29, 1996, Petrobras provided IVI a comfort letter relating to equipment for the P-31 Project which was to be purchased by Mustang. (S-203.) The letter, which was addressed to Carlos Mauricio and signed by Antonio Justi of Petrobras, provided that if IVI did not pay for the equipment through the blocked accounts, Petrobras would make good on the commitments and deduct the amounts from the Consortium's credits. Mr. Justi testified that this letter was meant to reassure Mustang that Petrobras would allow the Consortia to withdraw finds from the blocked accounts to pay Mustang purchase orders provided there were a balance left in the contract. (Tr. at 3682-83, 3689-92.)

232. Felix Covington, a vice president of Mustang, testified that he did not know whether the March 29, 1996 comfort letter had been shared with suppliers. (Id. at 4250.) He also could not recall the circumstances under which the letter was issued. (Id.) Mustang and IVI subsequently entered into a supply agreement for the P-31 Project in April, 1996. (Id. at 4250-51.) Mr. Covington admitted that Mustang would have signed the P-31 supply agreement without the comfort letter. (Id. at 4251.)

233. A financial crisis was inevitable as soon as the delivery dates for the process equipment became due beginning in or about October, 1996. The payments due for the equipment would far exceed the BMS payments under the PBS. The Consortia had already spent the float received from Brasoil under the EAP on other project expenses such as their excessive labor costs.

234. In or about October, 1996, IVI refused to sign any more CIBC promissory notes for the purchase of equipment. Nelson Tanure himself made the decision not to sign the CIBC promissory notes. (Id. at 516, 1082-83, 1551, 3559-61.)

235. On October 25, 1996, Mr. Covington wrote to Mr. Mauricio to express Mustang's "serious" concern about "the deteriorating financial condition" of IVI and its failure to make payments to suppliers. (PB-865.) He warned that if the Exim Bank were to withdraw its support, IVI would face a payment crisis and contractual disputes. Vendors would demand letters of credit, raise prices, and delay shipments. Mr. Covington also observed that some \$50 million in shipments were pending and that "prompt action is imperative." He suggested that IVI request that Petrobras sign a guaranty of IVI's obligations to avoid interruptions in the shipment of equipment. 236. On November 18, 1996, Mr. Mauricio responded to Mr. Covington. (S-346.) Mr. Mauricio admitted that the Consortium had suffered financial reverses and indicated that it was unwilling to sign any further promissory notes at that time. (Id.)

237. The refusal of the Consortia to sign further CIBC promissory notes resulted in lengthy delays in the delivery of equipment and an escalation of the costs to complete the projects. (Tr. at 3613, 3361-63, 4109-12.)

238. The Petrobras Defendants did not accept Mr. Covington's proposal that they provide a general guaranty of IVI's obligations under the CIBC credit facility guaranteed by Exim Bank (Tr. at 1551, 4238), although they did issue comfort letters to individual vendors for specific equipment (S-344). In the comfort letters Petrobras agreed to pay the vendors if IVI filed for bankruptcy or failed to make payment after the equipment was delivered. (S-344.) Despite the comfort letters, the vendors would not release the equipment for shipment until they were paid in full. (Tr. at 4245; PB-226.)

239. On November 25, 1996, Mr. Covington notified IVI that Mustang would not ship equipment until the P-19 and P-31 Consortia found a method of paying for the equipment as a replacement for the CIBC promissory notes. (PB-791.)

240. On December 8, 1996 Carlos Mauricio and David Fischel met with Petrobras management. They informed Petrobras that the projected cost overrun for the projects had increased to \$189 million from the \$90 million estimate in May. (S-370 ¶ 15.) They also presented a reorganization plan IVI had developed with Banco Fator. According to the Banco Fator plan, IVI was to be split into two companies, one of which would be responsible for maritime port terminals and the other for offshore construction. (Id. ¶ 14; Tr. at 3270.)*fn2

241. During a subsequent meeting in December, 1996, Mr. Vilarinho was informed that IVI was negotiating with Maritima, possibly regarding a restructuring of IVI or a transfer of the offshore contracts. (Tr. at 3272.)

242. At a meeting on December 19, 1996, the Diretoria approved SEGEN's recommendation to enter into contractual amendments to pay for change orders. (S-372A.) The Diretoria also approved contract extensions for the P-19 and P-31 Projects of 60 and 93 days respectively. (Id. at 6.) SEGEN's submission advised the Diretoria that the contract balance in the P-19 Contract had been exhausted and that the P-

31 Contract balance was expected to run out in March, 1997. (Id. at 5.) The Diretoria decided to analyze the alternatives for completing the Contracts, including convening a 3.1 Meeting under the Bonds to obtain the formal position of the Sureties. (Id. at ¶ 25.2; Tr. at 3279.)

243. The amendments to the contract balances approved by the Diretoria in December 1996 represented the result of arm's length negotiations between the Consortia and Brasoil over the scope and value of the changes to the P-19 and P-31 Projects. (Tr. at 3548; S-291 at U2448.) Amendment Two to the P-19 Contract was in the amount of \$10,477,856.97. (S-445A.) Amendment Three to the P-31 Contract was in the amount of \$16,068,846.48. (S-446A.) Both Amendments were signed on February 3, 1997, effective as of December 19, 1996. (S-445A; S-446A.) Both Amendments provided that the parties ratified all other aspects of the respective contracts. (Id.)

244. In December, 1996, the Petrobras Board also approved direct payments in the amount of \$16 million for the P-19 Contract and \$15 million for the P-31 Contract which were requested by the Consortia to pay for essential equipment for the Projects that would not be covered by the progress payments due in January and February. (JS ¶ 261.) The purpose of these advances was to keep the Projects moving for the short term and create sufficient time to formulate a definite strategy to resolve the problems caused by the cost overruns. (Tr. at 3582-84.) The Consortia's letters requesting the direct payments due to the Consortia. (S-379; S-407; PB-159.)

245. On December 30, 1996, Guilherme Pires informed Petrobras that IVI would sign the promissory notes required to release the equipment ready for shipment, provided that Brasoil issued specific comfort letters for the equipment. (PB-153.)

246. Petrobras provided the requested comfort letters. IVI, however, refused to deliver the signed promissory notes required for the release of the equipment. Tr. at 1081-283, 3560-61.)

247. On or about January 6, 1997, CIBC suspended the credit facility, citing a serious material adverse change in IVI's financial condition. (PB-481.) Vital equipment remained in Houston awaiting shipment. (Tr. at 4109-10.) As Mr. Justi testified, this moment, caused by IVI's refusal to sign the promissory notes, was "the worst moment we had in the contracts." (Tr. at 3561.)

248. On January 9, 1997, David Fischel and Carlos Mauricio signed a letter acknowledging receipt of \$16 million as an advance for the P-19 Project and agreeing to repay that amount through a discount from a future progress payment. (PB-159.) The advance was used to pay Marubeni and for essential equipment. (Id.)

249. On January 21, 1997, CIBC made it clear to Petrobras that the Petrobras Defendants would not be asked to assume liability for the promissory notes already issued by IVI under the Exim Bank guaranteed credit facility. (PB-476.)

250. After December 20, 1996, when the Diretoria decided to defer discounting the direct payments from the P-19 BMS payments, SEGEN charged the direct payments for internal administrative purposes against the unexpended balance of the P-31 contract while a solution was sought to the IVI financial crisis. (Tr. at 3580-85.) On March 21, 1997, the Consortia requested that Petrobras and Brasoil charge the P-19 and P-34 direct payments against the unused P-31 balance. (S-491.)

251. SEGEN's decision to debit the P-19 direct payments from the P-31 contract balance did not have any effect whatsoever on the delivery of the process equipment waiting for payment in Houston. Petrobras had not decided what to do to liberate the equipment. The Consortia were responsible for purchasing the equipment under the contracts, but were trying to shift that liability to Petrobras.

252. The practice of charging the P-19 and P-34 direct payments against the P-31 balance was formalized in a letter agreement dated April 4, 1997. (S-514A.) This arrangement was discarded in favor of new blocked accounts as of April 23, 1997. (Tr. at 3583-85; S-1526A.)

Discussions between Petrobras, the Sureties, and the Consortia Regarding the Financial Problems of the Consortia and the Sureties' Obligations under the Bonds

253. On December 27, 1996, Mr. Quintella invited the Sureties to a meeting to discuss an objective solution to be applied in the event Brasoil declared a Contractor Default. (PB-352.) Mr. Quintella cited the continuous deterioration of the Contracts with the Consortia and the failure of the Sureties to

provide any positive proposal to solve these problems. He also cited the delays in shipping equipment caused by the Consortia's refusal to sign the CIBC promissory notes.

254. On December 30, 1996, Gary Wilson wrote to Mr. Quintella explaining that USF & G had been informed by the Consortia within the last thirty days that direct discussion with Petrobras had been positive and resulted in contract amendments. Mr. Wilson also reported, somewhat surprisingly, that USF & G was advised that the contracts "were progressing satisfactorily and on schedule." (S-383.) Mr. Wilson nevertheless agreed to attend a meeting.

255. Mr. Quintella sent Mr. Wilson a letter dated January 6, 1997 with financial information regarding the status of the projects (PB-485.) The attachments included a chart entitled "contract deficits." (Id. at 4.) The chart showed the amounts in excess of the original contract prices that the Consortia estimated would be necessary to complete the P-19, P-31, and P-34 Projects (totaling \$189 million) in the far right hand column and the amount of the recently approved amendments (totaling \$47.7 million) in the far left hand column. The middle column was entitled "claims." This middle column reflected the mathematical difference between the amounts approved for payment and the Consortia's estimated deficits at completion (a total of \$141 million.) The heading of the middle column did not mean that Petrobras or Brasoil recognized that the Consortia had claims that were unresolved after the December, 1996 meetings. (Tr. at 3631-32.)

256. The contract deficits, after taking into account changes in scope that had been recognized in the contract amendments that had been approved in December, 1996, included overruns caused by the drastic underbidding of the P-19 and P-31 Projects by the Consortia; the Consortia's increased costs due to their poor financial condition; the overheated nature of the market; the condition of the real; and the poor administration of the projects by the Consortia.

257. It would be unreasonable to find, as the Sureties urge (see Sureties' Proposed Findings of Fact at ¶ 77(b)) that the contract deficits of \$141 million were all claims for change order requests by the Consortia that were still pending. Mr. Wilson' testimony in support of that proposition was not credible. Beginning at least in January, 1997, the Consortia and the Sureties did, indeed, attempt to attribute all of the cost overruns on the projects to changes in the projects' scope allegedly caused by Petrobras, and argued that Brasoil therefore could not make any claim under the P-19 and P-31 Bonds because the contracts were not really in default and Brasoil had not paid all of the money that it owed to the Consortia as required by the terms of the Bonds. These arguments, however, are not credible in view of the fact that the Consortia had failed to document on an ongoing basis during the course of the contracts the alleged changes in scope that justified increases in the contractual cost of the projects. The huge increases in the contract prices sought by the Consortia in the face of the imminent depletion of the contract balances and the possible declarations of default are simply efforts to avoid the Consortia's responsibility for the cost overruns.

258. On or about January 8, 1997, representatives of Petrobras and Brasoil met with the Sureties to discuss a solution to the financial problems of the Consortia. The Sureties were assisted by American counsel. (Tr. at 1195-96; 1199-1200; 3561-62.) The Sureties informed Petrobras that they could not and would not take any action until the Consortia were formally declared in default. (Tr. at 1198-99; 3562-64.) Upon the declaration of a default, work on the projects would have to stop for several months while the Sureties "investigated." (Id.)

259. On the following day, another meeting was held among the Petrobras Defendants, the Consortia, the Sureties and their counsel. (Tr. at 1208-09, 3562-63.) The Sureties said that they could not begin their investigation prior to termination of the contracts and refused to advise Petrobras whether the performance bonds were valid. (Tr. at 3562-64.) It is plain that the Sureties were attempting to delay any action on the Bonds. By emphasizing the length and difficulty of any investigation and the need to declare a default on the Bonds before triggering the Sureties' obligations on the Bonds, the Sureties were emphasizing the disruption that would be occasioned by any invocation of the Bonds.

260. On January 10, 1997, Petrobras sent formal notices to the Sureties requesting 3.1 Meetings under the P-19 and P-31 Bonds. (PB-358; PB-359; PB-479; PB-480.) By letter dated January 14, 1997, USF & G's American counsel referred to the meetings earlier in January as 3.1 Meetings and advised Brasoil that the formal notices given by Brasoil on January 10 were an unnecessary redundancy. (PB-360.)

261. Meanwhile the Sureties began to prepare their defenses. On January 14, 1997, American counsel for USF & G wrote to Nelson Tanure. (PB-514.) After reminding Mr. Tanure of the indemnification obligations of IVI and Sade, USF & G's counsel charged that Mr. Tanure, in his individual and corporate capacities, controlled those entities and was interfering with the Consortia's contracts with Brasoil, exposing Mr. Tanure to substantial personal liability. (Id.; Tr. at 1218.)

262. USF & G's American counsel also wrote to IVI, Sade and Sequip Participações SA*fn3 ("Sequip") reminding them of their obligations pursuant to the indemnity agreement they had signed. (PB-477.)

263. Paragraph 8 of the February 17, 1995 indemnity agreement by and among IVI, Sade Vigesa, and Sequip, on the one hand, and the Sureties, on the other, granted the Sureties the right to inspect the books, records, and accounts of the principals and indemnitors at any time and until such time as the Sureties' liability under any bond was terminated. (PB-592; Tr. at 1415-16.)

264. The Consortia granted the Sureties free access to project records prior to the declarations of default and the Sureties were fully informed concerning the reasons why the projects were over budget and behind schedule. (Tr. at 513, 1049, 1419, 1436-37; 1440-41; 1502-03; PB-407; S-167; PB-410; S-291.) The Sureties had all the information reasonably required to make an immediate decision on which of the four options under ¶ 4 of the performance bonds to elect once Brasoil declared a formal default. (Id.)

265. The Sureties had full and complete access to the books and records of the Consortia no later than January 1997, approximately six weeks after the negotiation of the change orders to the P-19 and P-31 Project. (Tr. at 1502-03.) They could have insisted at that time that the Consortia correct any record-keeping deficiency with respect to change orders and job costs. They also had the opportunity to review the exhaustive backup documentation that the Consortia submitted to Petrobras during the negotiations of the change orders.

266. On January 29, 1997, Mr. Alceu wrote a memorandum to the Diretoria describing the attempt to reach an agreement with the Sureties on a resolution of the problems caused by the imminent exhaustion of the contract funds and on how to continue work on the projects. (PB-362.) Mr. Alceu stated that the Sureties had advised Petrobras that work would have to stop on the projects for an undetermined amount of time in excess of two months. Thus, a claim against the performance bonds was not considered a viable alternative. (Id. ¶ 12.) Mr. Alceu also informed the Board of the suspension of the CIBC line of credit and delays in shipping equipment. (Id. ¶ 22.) According to Mr. Alceu's memorandum, Brasoil had two alternatives going forward: first, the assignment of the P-19, P-31, and P-34 Contracts to a new company, or second, adoption of contract amendments that would allow the Consortia to continue working on the projects. The latter was deemed to be an unsatisfactory alternative because the Consortia had already proven incapable of fulfilling their contractual obligations and their financial conditions could worsen. (Id. ¶ 15.) Mr. Alceu alluded to IVI's existing plan to transfer the Contracts to Maritima, a process that would take a few months to be finalized. (Id. ¶ 16.) Mr. Alceu closed by informing the Diretoria that SEGEN would monitor the contract balances and the negotiations between IVI and Maritima. (Id. ¶¶ 25.1, 25.2.)

267. In January, 1997, it was not practical to move the P-19 and the P-31 to another yard or to bring in a replacement contractor. (Tr. at 4306-07.) According to IVI's figures, P-19 was approximately 84.26%

complete and the engineering was 88% complete. (Id. at 4306.) It would have been prohibitively expensive and difficult to redirect all the process and other equipment to another yard and to make P-19 ready for transit. (Id.) According to IVI's figures, P-31 was approximately 55% complete and the engineering was 75% complete. (Id. at 4306-07.) There were still openings in the P-31 hull. (Id. at 4307.) The direct cost of moving either P-19 and P-31 to a foreign yard alone would have been between \$5 million and \$12 million. (Id. at 4307-09.)

268. Following the January, 1997 meetings, the Sureties continued to attempt to discourage Brasoil from declaring a default on the bonds by emphasizing that they were entitled to stop work on the projects while they conducted "an investigation," that the Sureties could not make inquiries to determine whether the bonds were in effect and/or whether they wished to take over the projects until Brasoil had formally terminated the contracts with the Consortia, and that Brasoil would jeopardize its ability to obtain bonding for its future projects if it declared a default. (S-436; S-513; PB-363A at 9-10; PB-463; Tr. at 1301.) The Sureties made it clear that they expected any "investigation" would last for at least three and possibly as long as six months. (PB-363A at 10; Tr. at 3562; see also Tr. at 1336-38, 1349-53.) The Sureties actively encouraged Brasoil to seek a "global solution" rather than declaring IVI in default. (S-436; PB-463.)

269. The consequences of stopping work on the projects for a period of three months or more would have been catastrophic even if the projects remained at the same shipyards, and would have escalated the eventual cost of completion. (Id. at 3563-64.) Among other things, the work force would be demobilized and scattered, and suppliers could increase prices. (Id. at 3563-64, 4311.) Moreover, as the Sureties were fully aware, time was of the essence and Petrobras would lose millions of dollars each day in lost oil and gas revenues while the projects were halted. (Id. at 1484, 3563-64; PB-915 at 4 ¶ 4.)

270. Despite their position in this litigation that they were prejudiced by the failure of Brasoil to declare a default on the P-19 and P-31 Contracts in December, 995, the Sureties warned the Petrobras Defendants in January, 1997 and February, 1997 that the Consortia were not in default under the contracts, and that the Consortia had substantial claims that would replenish the contract balances. (See, e.g., S-436; PB-463; S-462.)

271. On February 3, 1997 Petrobras director Orlando Galvào Filho appointed a working group to study Petrobras' options regarding the P-19, P-31, and P-34 Projects. The working group, which was headed by Emma Rocha of SEFIN, was to report back within thirty days. (PB-468.)

272. On February 6, 1997, the Sureties, IVI, and Quintella signed a handwritten agreement in principle whereby IVI's offshore contracts would be assigned to Maritima. (S-448; Tr. at 1235-38.) The agreement was contingent upon Maritima and IVI reaching an agreement among themselves with respect to the assignment of the contracts and/or the transfer of ownership of IVI to Maritima. (S-448; Tr. at 1235-36, 1238.) The agreement in principle was never presented to or approved by the Diretoria of Petrobras or Brasoil. (Tr. at 1251-52.)

273. On February 6, 1997, Maritima submitted its terms and conditions to Petrobras for the assignment. of the Consortia's contracts. (S-449.) Maritima indicated that it would only take on the Contracts on a cost plus basis (with Maritima's margin being 10% of the amounts disbursed by Brasoil for the completion of the Contracts). (Id. at 3, 7.) Maritima would use the facilities of IVI to complete the Contract and retain the same management. (Id. at 4-5.)

274. Nelson Tanure testified that Maritima's terms and conditions were unacceptable to IVI. (Tr. at 469-70.) David Fischel testified that he advised Mr. Vilarinho to reject the Maritima proposal "because the projects would end up being a lot more expensive and would transform the lump sum contracts into cost plus contracts and include a 10 percent administrative fee or management fee, and I thought that Director Vilarinho should not approve that proposal." (Tr. at 958-59.) In addition, Law 8.666 prohibited Petrobras from entering into cost plus contracts. (Tr. at 3278.)

275. Mr. Vilarinho was understandably upset by the Maritima proposal and rejected it. (Tr. at 1251-52.) The assignment would have resulted in increased costs to Brasoil and would have resulted in an illegal contract being substituted for a favorable contract that Brasoil had obtained as a result of competitive bidding. While the Sureties incorrectly view Mr. Vilarinho's decision as evidence supporting their oft-expressed theory that a "secret decision" was reached in December 1995 and January 1996, it is plain that the rejection of the Maritima proposal was the only reasonable option available to Mr. Vilarinho at the time.

276. On February 14, 1997, Mr. Covington of Mustang wrote to IVI about the equipment that was waiting in Houston for shipment due to the Consortia's failure to make payment. (PB-1018 at 4.) Mr. Covington pointed out that suppliers had quoted favorable prices and terms, and had not insisted on letters of credit, based on the Exim Bank guaranty. He warned that the creditors were taking aggressive positions and that non-payment was threatening the completion of equipment.

277. On February 18, 1997, Dr. Fischel wrote to Petrobras, stating that "[i]n view of the exhaustion of funds under the P-19 and P-31 Contracts], as reiterated to you on several occasions but not as yet negotiated, we hereby request that Petrobras continue to transfer the necessary funds through the [blocked] accounts so that we may continue the work." (S-456.) Dr. Fischel also asked Petrobras to assume IVI's obligations under the CIBC/Exim Bank financing scheme and to enter into a new addendum to complete the Contract. (Id.) To the extent that the costs of the project exceeded the adjusted contract amounts, Dr. Fischel indicated the Consortia's willingness to propose a method of reimbursing Petrobras. (Id.)

278. On February 27, 1997, Dr. Fischel asked Petrobras to advance \$8,779,440.07 to Mustang in order to release equipment waiting to be shipped from Houston. (S-470.)

279. On March 6 the Petrobras working group headed by Emma Rocha submitted its report to Mr. Galvào. (PB-363A.) The report noted that an IVI bankruptcy would embroil the platforms in cumbersome bankruptcy proceedings with the attendant delays and uncertainties. (Id. at 8; see also Tr. at 3591-92.) However, the working group recommended that the proposal by Maritima to take over the projects be rejected because of the terms proposed and possible problems with the structure of the transaction. (PB-363A at 11.) The group also noted that, according to the Sureties, calling on the performance bonds could result in a six month long "investigation," which would cause additional repercussions. (Id. at 9-10.) Finally, the group recognized that it was not feasible to transfer the projects to any other contractor in the country. (Id. at 13.) Therefore, the working group recommended that up to \$172 million in direct funding be provided through new blocked accounts to allow the Consortia to complete the P-19, P-31 and P-34 Contracts, with such funding to be formalized by contract addenda or formal instruments of acknowledgment of debt. (Id. at 15; Tr. at 3595-97.)

280. On March 24, 1997, IVI informed Joel Renno, the President of Petrobras, that the negotiations with Maritima had failed. (PB-198.) Nelson Tanure attributed this to unacceptable demands by Maritima. (Tr. at 469-471, 507.) Mr. Tanure personally made the decision to terminate the negotiations with Maritima. (Id.)

281. On or about April 4, 1997, David Fischel countersigned a letter acknowledging that Brasoil had advanced \$66,112,254.55 in direct payments for equipment and that such payments would be deducted from progress payments due for P-31 after February, 1997 (BMS 19). (S-514A.) The \$66,112,254.55 included \$42,332,914.48 in direct payments authorized by the Diretoria in May 1996 for P-19, P-31, and P-34, \$15,000,000 spent on P-31 in December 1996 and January 1997, and \$8,779,340.07 paid to Mustang for the release of the equipment waiting on the docks in Houston. (Id. at 3.)

282. The April 4, 1997 letter agreement superseded the earlier requests from the Consortia that the direct payments for P-19 and P-34 made in 1996 be deducted from the respective contract balances beginning in December, 1996. (See, e.g., S-283; S-308; S-416.)

283. On April 11, 1997, Mr. Justi and Paulo Marcio Mauro sent letters to the Consortia and the Sureties inviting them to 3.1 Meetings regarding the P-19 and P-31 Projects. (PB-454.)

284. On April 14, 1997, Petrobras director Galvào wrote to the Bank of Tokyo-Mitsubishi and Marubeni Corp. seeking permission to declare a default under the P-19 Bond. (PB-436, Tr. at 3606.) Mr. Galvào also sought the permission of Nissho Iwai Europe PLC to declare a default under the P-31 Bond. (Tr. at 3606.)

285. On or about April 22, 1997, the relevant parties attended additional 3.1 Meetings regarding the P-19 and P-31 Projects. (Id. at 1314-15, 1332-33.)

Additional Funds to Continue Work on the Projects

286. On April 23, 1997, Brasoil and the Consortia entered into the first of seven letter agreements (dated April 23, May 6, May 9, July 1, September 18, December 8, and December 9, 1997) whereby Brasoil made funds available for the completion of the P-19, P-31, and P-34 Contracts. (S-1526A.) In the April 23, 1997 letter Brasoil first noted that the contract balances were exhausted, and advanced \$52.6 million for expenses required to complete the projects, with \$28 million of that to be used to restore funds to the P-31 Contract for the direct payments that had been made to purchase equipment for P-19 and P-34, bit charged against the P-31 balance. (Id.; Tr. at 3611.) Under the terms of the letter agreement, the Consortia acknowledged the advance and agreed to repay the funds upon terms to be agreed upon at the end of the job. (S-1526A.) The agreement provided that any and all "pleitos" from the Consortia "deemed owed by Petrobras/Brasoil, shall be the object of a settlement of accounts concerning the amount of the allocation after the removal of the units from the shipyards" and the Consortia must reimburse Petrobras/Brasoil the balance owed from the allocations. The agreement also provided that the amounts advanced would be deposited into new blocked accounts with withdrawals being exclusively for the use of the Contracts. The agreement noted, as did subsequent agreements, that it "does not entail a novation of any of the rights or obligations assumed by the parties, nor of the guarantees (performance bonds)." The initial agreements in the series also noted that Brasoil was

considering declarations of Contractor default, and later agreements acknowledged that such defaults had been declared.

287. The April 23, 1997 letter agreement superseded the April 4, 1997 letter agreement's system for accounting for direct payments and advances.

288. The direct payments pursuant to the letter agreements enabled the Consortia to continue work on the projects. The payments made to the Consortia outside the BMS system did not diminish the Consortia's incentive to complete the projects.

289. The letter agreements refer to "pleitos" that the Consortia would be free to present when the settlement of accounts occurred. "Pleito" literally means "plea," although it is often translated as "claim." (Tr. at 3618-19; see also Tr. at 653.) "Pleitos" refers to requests by the contractor for additional sums due to unforeseen hardships that have complicated the work, such as a change in exchange rates. (Tr. at 3618-19.) "Pleitos" are generally distinct from formal contractual changes backed up by a change order. (Id.) The owner has full discretion to accept or reject pleitos. (Id. at 3619.)

290. Dr. Fischel acknowledged that there were factors other than change orders that increased the cost of the project such as the state of the Brazilian real and the increased costs of construction materials. (S-432 \P (c).) Dr. Fischel testified candidly that these were the kinds of costs he would seek to share with Petrobras out of fairness in any final settlement of accounts, but that Petrobras was not obligated to pay for them. (Tr. at 1079-81, 1090.)

291. The April 23, 1997 letter expressly stated that it was not a novation of the original Contracts. (S-1526A at 1.) Dr. Fischel testified that he understood the letter did not change any of the duties and responsibilities of the parties under the contracts. (Tr. at 1088.) This letter and its successors did not alter the price or compensation arrangements of the conversion contracts. Brasoil expressly stated that it was considering declaring contractor defaults under the performance bonds. Thus, there was no commitment to keep the Consortia on the job through the completion of the contracts. There was also no commitment on the part of Brasoil to advance additional funds in subsequent months or to provide funding for any particular expenses. The Sureties were advised of the April 23, 1997 letter because Dr. Fischel discussed the letter with the Sureties' American counsel. (Tr. at 1091.) 292. The parties established new blocked accounts for the funds made available by Brasoil pursuant to the letter agreements. (Id. at 3616-18.) Unlike the funds in the old blocked accounts, the funds in the new blocked accounts had not been earned by the Consortia and remained the property of Brasoil. (Id.) Thus, after April 23, 1997, the funds advanced by Brasoil to complete the project were not progress payments, but rather payments for project expenses, using Brasoil funds. Brasoil also made direct payments to suppliers independent of the new blocked accounts. (Id. at 3803-04.)

293. of the \$52.6 million advance provided by Brasoil pursuant to the April 23, 1997 letter agreement, \$28.2 million was used to purchase essential equipment for the P-31 Project and \$17.6 million was used to purchase essential equipment for the P-19 Project. (Id. at 3609; PB-444 at 7-8.) The remainder was used for P-34 expenses. (PB-444 at 9.)

294. The Sureties rely on an April 11, 1997 memo from Marcio Eiras Moines, the Superintendent of SEFIN, which refers to the \$52 million advance as corresponding to "Change Orders" and "other charges that would be agreed upon by the end of the project. . . ." (S-3117.) The Sureties argue that this shows that these advances were increases in the scope of the project. However, Marcio Eiras had responsibility for finance rather than engineering and there was simply no testimony from him at trial, even through his deposition, as to the meaning of this statement. Justi testified credibly that the \$52.6 million in advance payments approved by the Diretoria had nothing to do with change orders and that any contrary statement was absurd. (Tr. at 3710, 3732.) The advance was, instead, for the purpose of purchasing specified equipment. (Id. at 3729-32.)

295. Although the BMS system was continued through the end of May, the payments earned by the P-31 Consortium under the EAP fell far short of the amounts required to pay for equipment and other payments required to complete P-31. At the end of April 1997, the Consortium estimated that \$82.5 million would be required for P-31 during the months of March, April and May 1997. Eighty percent of this amount was for equipment and materials. (PB-204; Tr. at 2362.) If Brasoil had continued with the payment scheme under the EAP schedule, progress on P-31 would have come to a virtual stop because the Consortium had no means to pay for essential equipment and materials. (S-495A.)

296. The Petrobras Defendants did not enter into a blanket commitment to fund all of the Consortia's costs until completion of the projects. The Diretoria proceeded on a step by step basis. (Tr. at 3627.) The Petrobras Defendants selected what they wished to pay for from the lists submitted by the Consortia. (Id. at 969-971.)

297. On May 6 and May 9, 1997, the Consortia signed letter agreements acknowledging that Brasoil would advance an additional \$74.32 million for expenses necessary to complete the P-19 and P-31 projects. (S-1526A at 5, 9.)

298. Meanwhile, the Sureties were attempting to marshal evidence to resist claims on the performance bonds. On May 8, 1997, a Brazilian lawyer working for the Sureties wrote to Mr. Tanure seeking permission for American lawyers to review files at the Caju shipyard. The lawyer wrote that "we expect, with the assistance of Dr. Fischel, Carlos Mauricio and Luciano Pereira, to gather, from the extensive correspondence exchanged with Petrobras, documents that, among other things, will evidence and support the thesis that Petrobras has effectively taken over the jobs in jeopardy of the Contractor's autonomy." (PB-366.)

299. The system whereby Brasoil made direct payments of expenses had been in effect for less than three weeks when, on May 12, 1997, Brasoil formally declared the P-19 Consortium to be in default under the P-19 Contract.

300. The direct payment regime was in effect for approximately eight weeks for P-31, which was declared in default on June 16, 1997. A total of \$43.44 million was spent to cover necessary P-31 job expenses for April and May. (PB-429 ¶ 4.) The Sureties were not prejudiced by these expenditures outside the BMS system because the payments were used to complete the P-31 Project and would have been necessary in any case.

Declarations of Default

301. On May 12, 1997, the Petrobras Defendants sent letters to the P-19 Consortium and to the Sureties declaring a default under the P-19 Contract and terminating the P-19 Consortium's right to complete the project. (PB-318; S-582.) The Petrobras Defendants informed the P-19 Consortium that the total contract price (\$165,832,060 plus the agreed contract amendment that had increased the amount of the contract to \$176,010,516.97) had already been disbursed but the Consortium had not fully met its obligations under the Contract. "Thus, in accordance with the terms of Article Eight of the General Contract Conditions (Appendix I of the Contract), we are formally notifying you of the Consortium's Contract default and loss of contract rights." The notification went on to state: "However, despite cancellation of the Consortium's "right, we point out that your obligation to complete the project

remains intact, and will be the subject of new financial arrangements between Brasoil and the Consortium, until subsequent deliberation has been concluded." (PB-318 (emphasis in original).) In their notice to the Sureties, the Petrobras Defendants stated: "Pursuant to paragraph 3.3 of the Performance Bond . . ., Petrobras/Brasoil agrees to pay the balance of the Contract Price to the sureties. Unfortunately, there is no balance remaining." (S-582.)

302. The notice sent by Petrobras plainly declared a default on the P-19 Contract and terminated the P-19 Consortium's right to complete the contract. It also stated that there were no sums due under the Contract. Thus, the Petrobras Defendants provided sufficient notification to comply with its obligations under ¶ 3 of the P-19 Bond. They had called a meeting under ¶ 3.1. They had "declared a Contractor Default and formally terminated the Contractor's right to complete the Contract," pursuant to ¶ 3.2 of the Bond. They also satisfied ¶ 3.3 of the Bond which required that the Owner agree to pay "the Balance of the Contract Price," because there were no further funds that were required to be paid under the P-19 Contract.

303. The "Balance of the Contract Price" is defined in the Bond to mean "The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, . . . reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract." (S-72A ¶ 12.1.) Brasoil's cumulative payments on P-19 exceeded the adjusted contract balance of the P-19 Contract in or about January 1997. (Tr. at 3861; PB-1301.)

304. While the Sureties argue that the "Balance of the Contract Price" could not be reduced by any payments that were not in accordance with the BMS schedule, the Bonds do not define the "Balance of the Contract Price" so narrowly that it is limited to payments that are made in accordance with the specific payment schedule in the Construction Contract. Indeed, ¶ 7 of the Bonds provides: "The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations." (Emphasis added.) In other words, the Bonds exclude a reduction in the Balance of the Contract Price for expenditures unrelated to the Contract, but there is no similar exclusion for expenditures related to the Contract that are not made in strict compliance with the payment schedule in the contract. Moreover, in ¶ 8 of the Bonds, the Sureties waived "notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations."

305. Brasoil spent approximately \$55.6 million over the BMS schedule on P-19 prior to the declaration of default. of this amount approximately 69% was spent on equipment and materials, 17% was spent on labor and 15% on other cost categories such as "as new" material and equipment, consumables, rentals, classification, and maneuvering. All of the money was spent on valid project costs. (Tr. at 3860.)

306. The four month delay in declaring a default from January, 1997, when the P-19 funds were exhausted, to May 12, 1997 was reasonable under the circumstances. Brasoil and Petrobras were under no obligation to declare a default at the earliest possible moment. Moreover, the Sureties plainly attempted to discourage any declaration of default. In any event, in view of the efforts to find a "global solution" and the time required to determine how to proceed, the delay in declaring a default was reasonable.

307. The Sureties elected to conduct an investigation of the P-19 Bond, thereby waiving, in accordance with ¶ 4.4 of the Bond, their rights to perform and complete, arrange for completion or obtain a new contractor under ¶¶ 4.1-4.3 of the Bond. (S-72A.)

308. The Sureties have argued that the May 12, 1997 declaration of default was not effective because it was not a clear default and because it did not plainly terminate the Consortium's "right to complete the contract." That is not a fair statement of the facts or the terms of the documents. The Petrobras Defendants plainly stated that they were declaring a default, and the declaration occurred under circumstances, including the fact that two 3.1 Meetings had occurred, that would have made it clear that the Petrobras Defendants were declaring a default if any uncertainty did exist.

309. In their May 12, 1997 declaration, the Petrobras Defendants did claim that the P-19 Consortium's "obligation to complete the project remains intact." There is some question whether, after the Petrobras Defendants terminated the Consortium's rights under the P-19 Contract, the Consortium really continued to have obligations under the Contract. But the fact that the Petrobras Defendants may have been mistaken regarding the Consortium's rights. Moreover, if the Consortium did not continue to perform, tiny contractual damages against the Consortium would be increased and continuing to perform under the contract would mitigate damages. Thus, in the circumstances of this case, there continued to be an obligation to perform to mitigate damages.

310. While the Sureties now dispute whether there really was a termination of the P-19 Contract, at the time they regarded the May 12, 1997 letter with respect to the P-19 Contract and the June 16, 1997 letter with respect to the P-31 Contract as effective termination under the performance bonds. (Tr. at 1316-17, U348-49.) As the Sureties' American counsel wrote in a lengthy May 30, 1997 letter to Petrobras' counsel: "The Contractor regards Petrobras' May 12th termination to be as Petrobras has stated: a termination of the P-19 Contract pursuant to [§ 8 of the General Contractual Conditions]. The Sureties are proceeding on the same premise. Thus, the P-19 contract no longer exists; all that remains at this point are the competing claims of the Owner and Contractor for breach of that contract; and a contention by the Owner that the Sureties' bond obligation has now been triggered." (PB-561 at 2.)

311. There was some self-serving correspondence by the P-19 Consortium at the time which attempted to express a rejection of the default. (See, e.g., S-602 at 4-7.) But Petrobras was clear in stating that it had declared a default. As Mr. Alceu wrote to David Fischel on May 21, 1997: "As you know, said notification, issued in accordance with paragraph 3.2 of the Performance Bond, declares the Contractor in default due to failure to complete the Contract under the price established in the contract and in view of its failure to comply with the contractual schedule. As expressly acknowledged in your letter, the Contract funds have been depleted without the project being completed." (S-605.)

312. The Sureties only made a token effort to explore the possibility of taking over the Contract. They did not seriously pursue the option of bringing in a replacement contractor. Indeed, in May-June, 1997, it would have made no sense to transfer the platforms to another yard or to bring in a replacement contractor. (Tr. at 4285-86, 4293-4301; S-1527 at 34.) Moreover, the Sureties had known since July, 1996 that moving the projects was nearly impossible. As Mr. Bazaar's July 24, 1996 notes ask: "[w]here could Petrobras move the jobs at this late stage since IVI has the only 2 Brazilian shipyards to complete the job[s]"? (PB-915 at 4.)

313. The Sureties did not set about conducting any good faith investigation of their options under the Performance Bonds but rather continued their efforts to prepare for litigation and to develop litigation positions while characterizing their activities as "investigation." (S-606; PB-366; Tr. at 1346-1353.) On May 16, 1997, American counsel for the Sureties wrote to Petrobras emphasizing the scope of the allegedly necessary investigation, warning Brasoil not to take any action in connection with the P-19 Project that might jeopardize the Sureties rights to complete the project, and stating that any expenditures on the Project would not be considered as valid by the Sureties. (PB-367.) On May 22, 1997, the Sureties' American counsel sent Petrobras a "First Document Request" with two and a half pages of definitions and instructions seeking 48 categories of documents including "[a]Il documents which refer or relate to Project P-19". (S-606 at S-14.) The document request was similar in all respects to a document request made under Rule 34 of the Federal Rules of Civil Procedure. (Tr. at 1350-51.) The

Sureties included an investigation schedule indicating that their investigation of the P-19 claim alone would extend past August 1. (S-606 at 15.)

314. Time was of the essence in the P-19 Contract. (PB-279 at 267 § 6.1.) The Sureties were aware that each day of delay cost Petrobras substantial lost revenue as a result of lost production. (PB-915 at 4 ¶ 4; Tr. at 1484.)

315. Since the Sureties declined to take over the P-19 Project, Brasoil was left to mitigate its damages by completing the project. The original Contract with the Consortium had been terminated. Brasoil initially used the Consortium to complete the P-19 Project by paying necessary expenses without any allowance for profit. This was the least expensive way to complete the project because Brasoil would have to allow a profit to any replacement contractor.

316. The total costs incurred by Brasoil for P-31 exceeded the adjusted contract balance sometime in late May or early June 1997. (Tr. at 3859-60; PB-1302.)

317. On June 16, 1997, the Petrobras Defendants declared the P-31 Consortium to be in default and demanded that the Sureties perform under the bond. (S-646.) The notification was similar to that for the P-19 Project. It noted that the entire contractual amount as amended (\$179,968,887.48) had already been exhausted but "the Consortium did not fulfill its obligations, as defined in the First Clause of the contractual instrument in question. Therefore, in agreement with the General Contractual Conditions . . . we are formally communicating to you lack of fulfillment (Contract default) of the Consortium and the loss of the rights of the contract." (Id.) The notice contained the same paragraph reminding the Consortium that in spite of the loss of the Consortium's rights under the contract, their obligation to complete the work remained intact. (Compare PB-318 at 3 with S-646 at 4.) In the notice to the Sureties, the Petrobras Defendants advised the Sureties that a "notice of Contractor Default" was enclosed and informed the Sureties that it agreed to pay the balance of the contract price pursuant to ¶ 3.3 of the Bond, but that no balance remained. (S-646 at 1.)

318. For the reasons explained above with respect to the P-19 Bond and the default declaration on the P-19 Project, Brasoil properly declared a default, terminated the P-31 Contract and fulfilled its requirements under ¶ 3 of the P-31 Bond. The adjusted contract balance on the P-31 Contract was exhausted, and there was no "Balance of the Contract Price" to be tendered to the Sureties under the P-

31 Bond because Brasoil had paid more than the adjusted contract price to the P-31 Consortium for expenses that were proper under the P-31 Contract prior to the declaration of default. (Tr. at 3857-60; PB-1302.) Specifically, Brasoil spent \$61.6 million on P-31 in excess of the BMS payments prior to the default date. (Tr. at 3858.) 81% of the \$61.6 million was spent on equipment for P-31, 9% was spent on labor, and the balance on other essential project costs such as equipment rental and overhead. (Id.)

319. The Sureties argue that amounts paid outside the BMS system should not properly be considered as payments pursuant to the P-19 and P-31 Contracts, so the respective Consortia were not actually in default because more funds were owed to them. However, the advance payments allowed the projects to proceed, reduced the risk of the Sureties by furthering the completion of the respective projects on the most expeditious and efficient basis, and reduced the amount of work that the Sureties would have otherwise been responsible to perform or pay for. The Sureties place great reliance on testimony by Frederick Hamilton, the accounting expert for the Petrobras Defendants, which candidly pointed out that there was a difference between the amounts expended in accordance with the BMS schedules for the P-19 and P-31 Projects and the total amounts that were expended, and that the amounts that had been expended under the BMS schedules had not exhausted the adjusted contract price at the times the defaults were declared on the P-19 and P-31 Contracts. (PB-1301; PB-1302; Tr. at 3858, 3860.) However, at trial, Mr. Hamilton testified very credibly that all of the payments — both the BMS payments and the additional direct payments and advances were valid payments that were necessary to get the projects done. (Tr. at 3897.) As a matter of fact, the payments were proper payments under the Contracts even though the schedule of the payments was accelerated from that otherwise provided in the BMS schedule.

320. According to the monthly report prepared by the P-31 Consortium, the P-31 Project was 72.4% completed when Brasoil declared the default on June 16, 1997. (PB-661 at 2917.) The completion of the project would have been delayed for an inordinate period if the P-31 Consortium had been removed from the job in mid-June. Moreover, there were no assurances that a replacement contractor would have been permitted to use IVI's facilities, which were the only yards in Brazil capable of undertaking projects of this scope. (Tr. at 4293.)

321. Not long after the declarations of default, the Consortia lost the senior management team that had been brought in from the Montreal Group to manage the Brasoil projects. David Fischel resigned as president of IVI in June, 1997. (JS ¶ 277.) In July, 1997 Dr. Fischel became the president of Empresa Brasiliera de Engenharia S.A. ("EBE"), a Brazilian engineering company. (Tr. at 897.) Guilherme Pires, the project manager of P-19, resigned from Sade Vigesa in June, 1997, shortly after the declaration of default. (JS ¶ 84.) Carlos Mauricio, the director of offshore services for IVI and a vice president of Sade Vigesa, left the companies in or around September, 1997. (Id. ¶ 80; Tr. at 1938-39.)

322. P-19 was moved from the Verolme Shipyard in Angra dos Reis to the Maua shipyard in Niteroi on August 17, 1997. (Tr. at 3237; JS ¶ 272.)

323. On June 26, 1997, counsel for Brasoil wrote to counsel for the Sureties formally demanding, pursuant to ¶ 5 of the P-19 Bond, that the Sureties perform their obligations under the P-19 bond within 15 days. (S-663.)

324. On August 18, 1997, the Sureties denied liability on the performance bonds, and filed the present declaratory action in the Southern District of New York. (JS ¶ 280.)

325. If Brasoil had discontinued work during the Sureties' "investigation," the P-19 Project would have been paralyzed for a minimum of three months — the time between the declaration of default on May 12, 1997 and the formal denial of Brasoil's claim on August 18, 1997.

326. On September 7, 1997, the Vidal was moved from the Verolme shipyard to the Ishibras yard in Rio de Janeiro. (JS ¶ 275.)

327. On September 9, 1997, Brasoil entered into a contract with Setal Engenharia Construcoes e Perfuracoes S.A. ("Setal") to complete the offshore work to commission P-19. (JS ¶ 273.)

328. The P-19 platform departed for the Campos Basin on September 19, 1997. (JS ¶ 279.)

329. The Consortium's role in the P-19 Project effectively ended when P-19 was deployed to the Campos Basin.

330. Once the P-19 platform arrived offshore, Brasoil discovered that much of the work on the platform had been performed improperly, requiring extensive repairs and rework. (Tr. at 3214-17.) Among other problems, the hydraulic system was contaminated, the oil export pumps failed, a crane boom had to be replaced, and the air-conditioning system failed. (Id.) The air-conditioning system, which had supposedly been restored to "as new" condition, had to be entirely replaced. (Id. at 3216.)

331. On February 20, 1998, Brasoil executed a contract with Empresa Brasileira de Engenharia S.A. ("EBE") for additional work on P-19. (PB-341.) David Fischel signed the contract as president of EBE. The work was to be completed within 300 days. (Id. ¶ 6.1.) The contract included work for the conclusion of the systems that comprise the platform. (Id. ¶ 1.2.2.)

332. The necessity for the additional P-19 contracts, and in particular the EBE contract, lends strong support to the contention of the Petrobras Defendants that the P-19 Project was not completed before April, 1998. In addition, Mr. Hamilton identified costs spent on the P-19 Project up to April, 1998. (Tr. at 3802-03.)

333. On December 4, 1997, Brasoil removed the P-31 Consortium from the P-31 Project. (Tr. at 2311.) On the same date, the Petrobras Diretoria also approved additional expenditures of \$49.8 million to complete the P-31 Project. (PB-623.) Thereafter, Brasoil completed the Contract using several of the P-31 Consortium's subcontractors. The replacement contractors were paid a total of approximately \$25.6 million to complete the job. (Id. at 10; S-1483.) The remaining \$24.2 million was to be paid to vendors for materials and equipment. (PB-623 at 4, 6.) The reasons for the additional funding included the additional costs resulting from the late arrival of equipment, strikes, and inaccurate cost estimates. (Id. at 4-5.)

334. The P-31 platform was damaged in February, 1998, when the P-31 boiler water supply de-aerator exploded during a test of the boiler water system. The cause of the explosion was excessive pressure due to a closed bellows valve located downstream from a pressure valve. The damage caused a delay of 60 days in the transfer of the platform to the Campos basin. (Tr. at 4146-48.)

335. Brasoil's completion contractor was responsible for two thirds of the delay caused by the explosion. The P-31 Consortium was responsible for one third of the delay because it was responsible for removing the bellows valve after the conclusion of a prior test of the piping system pressure. Thus, 20 days of the 60 day delay are attributable to the P-31 Consortium. (Tr. at 4146-48.)

336. On May 30, 1998, P-31 was deployed to the Campos Basin. (JS ¶ 276.)

337. On July 24, 1998, Brasoil nominally sold P-31 to Edelweiss Corporation, a special purpose company owned by Nissho Iwai, in a sale-leaseback transaction. This transaction was in fact a financing arrangement, because title would revert to Brasoil in eight years in return for a fixed payment from Brasoil. (S-771; Tr. at 3524-25, 3770-72.)

338. Section 13 of the P-31 Contract provided that the Contract would be completed when Brasoil issued a Term of Final Acceptance ("TRB"). The 12 month warranty period would commence after the parties signed the TRB. Brasoil had the option of signing the TRB at the time that the P-31 was installed at its final location, but was not required to do so unless all operational tests had been successfully completed and Brasoil had approved the final documentation, duly updated and covered by certificates issued by the classification society. (PB-820 at 514-15, 686.)

339. A similar set of contract provisions provided for the completion of the P-19 Contract. The Contractor was to issue a Statement of Temporary Acceptance corresponding to the acceptance of the systems as a whole, and agreed to by Brasoil, after successful completion of operational testing of all equipment on the vessel, and approval by Brasoil of the final documentation relative to the scope of the respective work. (PB-279 at 220, 272-73, 724.) The Statement of Temporary Acceptance was "he document that began the 12 month warranty period. (Id. at 221, 273.)

340. The litigation among the parties and the discharge of the P-19 and P-31 Consortia precluded the signing of any document of acceptance of the Consortia's work, which would provide an endpoint to the Contract in the usual case. The P-19 and P-31 Projects were both handed over to Petrobras' E & P department for operation on December 31, 1998. (Tr. at 3224, 4144, 4192.)

341. Frederick Hamilton, the Petrobras Defendants' accounting expert, testified credibly that the total cost overrun on the P-31 Project was \$116,209,776. (Tr. at 3821.) This figure was arrived at by determining what Brasoil spent in excess of the adjusted budget. The adjusted budget was arrived at by taking the initial contract price (\$163,000,021) (PB-820 at 880), adding the change orders that were actually approved (\$16,968,846) (S-446A), and adding other adjustments that the technical expert for the Petrobras Defendants concluded Petrobras should be liable for (\$9,043,048), to arrive at a total adjusted budget of \$189,011,915 (Tr. at 3820). Brasoil had actual costs for the P-31 Project of approximately \$306,968,000, but the experts for the Petrobras Defendants subtracted other costs such as overhead and duplicative payroll costs that should not be included in costs, reducing the actual cost figure to approximately \$305,221,000. (Tr. at 3820-21.) Subtracting the approximate adjusted budget figure from the actual cost leaves a cost overrun of just over \$116,209,000. (Id. at 3821.)

342. Using the same methodology for the P-19 Project as explained above for the P-31 Project, Mr. Hamilton testified credibly that Brasoil incurred a total cost of approximately \$279,885,000 on the P-19 Project, a cost overrun of some \$98,660,000 over the adjusted Contract price of approximately \$181,225,000. (Id. at 3827-33.)

343. The testimony by Mr. Hamilton and by Scott McClure, the naval architecture expert for the Petrobras Defendants was reasonable and credible, and was supported by contemporaneous documentation and the testimony of the Petrobras managers for the P-19 and P-31 Projects. The cost estimates offered by Mr. Hamilton and the conclusion that the costs being sought by Brasoil in this litigation were in fact expended on the P-19 and P-31 Projects were both reasonable.

344. The testimony by the engineering and construction expert for the Sureties, Theodore Trauner, was to the effect that the contracts became cost plus contracts and were not managed as lump sum contracts. For the reasons explained above, this testimony was not credible and is not supported by the facts. As a result of his theory that the contracts became cost plus contracts and his mistaken assumption that this dispute between the Sureties and Petrobras does not encompass some of the same issues that a construction claim would, Mr. Trauner did not engage in the careful item-by-item approach used by the experts for the Petrobras Defendants. (Id. at 2497-98.) However, the Sureties have themselves made the expenditures an issue by contesting whether they properly reduced the contract balances. Moreover, the nature and amount of the payments are inextricably linked to the determination of whether the changes were within the terms of the contracts. Finally, an analysis of the work and the cost of the work is essential to a determination of damages in this case. By beginning with assumptions and theories which were not credible or reliable, Mr. Trauner failed to give credible testimony on these issues on which the Petrobras Defendants' experts and construction managers gave credible testimony.

Brasoil Did Not Fundamentally Change the P-19 Project, Interfere with Construction, Make Excessive Changes, Fail to Recognize Change Orders, Fail to Grant Extensions of Time or Otherwise Breach the P-19 Contract

345. The Sureties have argued that substantial changes in the scope of the Projects demanded by Petrobras on behalf of Brasoil caused the substantial cost overruns on the P-19 and P-31 Projects. They have also argued that the P-19 and P-31 Consortia should have been compensated for these changes in scope and they should have been reflected in change orders. The Sureties therefore maintain that the Contracts were not really in default because Brasoil owed substantially more money to the respective Consortia, and further that the scope of the projects were changed so fundamentally that the Sureties were relieved of any obligations under the Bonds. Moreover, the Sureties point to the alleged changes and argue that this is evidence of the degree to which Petrobras in fact was dominating and controlling the Consortia such that Petrobras should be liable along with the Consortia for all of their indemnification obligations to the Sureties.

346. None of these arguments has a factual basis. The cost overruns were attributable to reasons that were peculiar to the Consortia, such as underbidding, the financial condition of the contractors, and poor administration of the contracts, as well as reasons that would have faced other contractors who had obtained the bids to perform these contracts, such as the overheated nature of the market and the problems of the real. In either case, Brasoil was not obligated to pay for those expenses. The Sureties' arguments are an inaccurate after-the-fact reconstruction of the way in which the contracts were actually administered and performed.

347. While Petrobras did make requests of the P-19 Consortium, the P-19 Project was managed by the P-19 Consortium without undue interference from Petrobras or Brasoil. (Tr. at 2031-34, 3335-36.)

348. The changes to the P-19 Project were commensurate with a project of this size and complexity in the offshore industry. (Id. at 4032, 4036-37, 4336.) There were no material or qualitative changes, whether considered individually or collectively, to either project. (Id. at 4036-38.)

349. There were approximately 25 changes to the scope of the P-19 design. (Id. at 4141.) The principal changes were made early in the project, during its design phase. (Id. at 4142.) The changes did not unduly interfere with or disrupt on-going construction work.

350. Section 11.2 of the P-19 Contract provided that within seven days from the date that Brasoil requested a change order, the P-19 Consortium was required to submit the quantity of work involved and the respective prices, which were to be calculated in accordance with the unit prices in Schedule B.

(PB-279 at 224.) The P-19 Consortium was required to accept any increases in the scope of the work up to 25% of the contract price. (Id.)

351. On the P-19 Project, technical clarification and changes were formalized in a document known as an ETC. (JS ¶ 227; Tr. at 3180, 3220-21; 4059-61.) The ETCs involving change orders described the proposed change. (See, e.g., PG-667; S-1091.)

352. The practice in the offshore construction industry is for the contractor to include both direct and indirect costs in the pricing of the change order, including any impact costs. (Tr. at 3997-98, 4057.) The owner needs to know in advance what the yard intends to charge for a change order. (Id. at 4058.) The effect, if any, on scheduling also needs to be determined so that the parties can determine whether an extension of time is required. (PB-575 item 2; Tr. at 3138-40.)

353. The P-19 Consortium provided Brasoil with a listing of its claims for project changes on November 13, 1996. (PB-125.) On November 15 and December 9, 1996, the Consortium and the Petrobras Defendants met to negotiate the amount to be paid for changes on the P-19 Project. (PB-496; PB-134.) At the December 9, 1996 meeting, Marcio Ferreira Alencar represented Brasoil/Petrobras; Antonio Domingues dos Santos Neto (the Consortium engineer responsible for cost control on the P-19 Project) and Nelson Aun represented the P-19 Consortium. (PB-134.) The meeting minutes reflect that the claim presented by the P-19 Consortium "is both complete and exhaustive to date, and covers without exception all changes in scope to this point . . ." (Id. item 1.)

354. The negotiation of change orders was bona fide and above board. There were no instructions from upper management to arrive at a pre-set amount for change orders. (Tr. at 3333-34.) There were no agreements between the Consortium and Brasoil/Petrobras to defer the negotiation of change orders until the end of the projects. (Id. at 3168, 3332-33.)

355. At the December 9, 1996 meeting, the parties agreed that the net value of recognized change orders on P-19, taking into account credits due Brasoil for reductions in scope, amounted to \$8,273,235. (PB-134 item 5.) Brasoil decided not to claim the approximately \$2 million in credits at that time, so the immediate increase in Consortium funding that resulted from the negotiations was \$10,477,857. (Id. at 5.)

356. The figures agreed to at the December 9, 1996 meeting were incorporated into Amendment Two to the P-19 Contract, which also provided for a sixty day extension of the project's completion date. (PB-317; Tr. at 3202; JS ¶ 146.) The amendment was a final and conclusive settlement of all project changes that occurred prior to the meeting. (Tr. at 3410.) The sixty day extension of time was sufficient to compensate for the changes in the project's scope. (Tr. at 4141-42.)

357. There were minimal design changes to P-19 after the December 9, 1996 meeting. (Id. at 3200-01.) As the Petrobras Defendants' naval construction expert, Scott McClure, testified, the true value of changes which were never negotiated and remained unrecognized at the conclusion of the project is \$660,000. (Id. at 4044-48.) Mr. McClure arrived at this figure by reviewing the Consortia's comprehensive list of change order claims set forth in this action, considering whether such claims had been concluded in Amendment Two to the P-19 Contract, and comparing the claims against the specifications set forth in the contracts. (Tr. at 4039-49; PB-1114.) The value of valid, unresolved change orders was determined using unit prices from Schedule B of the P-19 Contract. (Id. at 4045.) The methodology used by Mr. McClure to identify and evaluate claims for change orders was reasonable and reliable, and the Court found the witness to be credible and persuasive.

358. The combined effect of all valid changes to the P-19 Project was to increase the value of the project by a total of \$8,933,235, which is less than 5.5% of the original contract price.

359. The Consortium had an incentive to document any legitimate change orders and to seek compensation for them. The absence of such claims from the December 9, 1996 meeting and minutes supports the conclusion that the increased cost of the project was not caused, as the Sureties claim, by changes in the scope of the project.

360. Certain technical aspects of the P-19 Project are discussed in more detail below.

The Spider Deck

361. The P-19 platform ultimately included a "spider deck" — an extra deck suspended from one of the Treasure Stawinner's two original decks. (Tr. at 913-14, 2534.) The credible evidence does not support the Sureties' contention that this was a change in the scope of the contract.

362. A "general arrangement" specifies the location and layout of equipment on a platform or unit. (Tr. at 2972.) Before the P-19 Consortium submitted its bid, it engaged Aker Omega to prepare a general arrangement for the P-19 after conversion. (Id. at 1954-55.) The Aker Omega arrangement did not provide for a spider deck. (Id. at 1955-56.)

363. The P-19 Consortium's bid package did not include the Aker Omega arrangement. (Id. at 2972-73.) Therefore, the P-19 bid commission did not consider the arrangement in qualifying the Treasure Stawinner or in awarding the project to the P-19 Consortium.

364. Section 3.60.1.1 of the Contract expressly provided that compliance with the minimum technical requirements for the platform did not excuse the Contractor from providing the required area for the process and other equipment. "Brasoil shall not be liable for the adequacy of any parameter relative to the vessel chosen by Contractor." (PB-279 at 216.)

365. The Aker Omega two deck arrangement failed to allocate space for essential equipment specified in the bid documents. (Tr. at 3111-13.) The arrangement did not meet regulatory requirements and was unsafe. (Id. at 3102-09, 3112-13.)

366. The Petrobras Defendants indicated the negative points of the Aker arrangement to the P-19 Consortium in March, 1995. (Id. at 2991; S-59.) Aker Omega developed a second proposal for an arrangement involving two decks, but that arrangement has not been located in this litigation. In any event, the P-19 Consortium chose not to follow the arrangement prepared by Aker, and at the time, did not express any resistance to incorporating a spider deck. (Tr. at 2990-91, 3122.)

367. The Sureties' construction expert, Mr. Trauner, testified that it was possible to locate all of the necessary equipment on two decks without using a spider deck. (Tr. at 2509-10.) However, this testimony was not credible because Mr. Trauner simply determined whether equipment could fit on two decks without determining whether the placement of the equipment would lead to any safety problems or would meet any requirements of the classification society. (Trauner Tr. at 2667-68, 2682, 1688.) In contrast, in a report to management dated April 17, 1997, Mr. Pires admitted that a spider deck was needed because of the lack of space on the Treasure Stawinner: "As the basic design was drawn up... it became apparent that more space was needed, even after deck expansions. As a result,

a third level was created (spider deck) outside the budget framework." (PB-438 at 8 ¶ 4.7 (emphasis omitted).)

368. The P-19 Consortium did not include a claim for a spider deck on its comprehensive list of items submitted to Petrobras on February 2, 1996, although that list was intended to include all of the claims by the Consortium for work up to that time. (S-1185, Attachment A; Tr. at 2101-02.) The P-19 Consortium also did not present a claim for compensation for the spider deck during the meeting to regotiate change orders for the P-19 platform on December 9, 1996. (Tr. at 3124-3125, 4057; see also PB-125.) Mr. Alencar, the Petrobras engineer responsible for design and the chief negotiator for the change orders, testified that the P-19 Consortium never asserted a claim to him that the spider deck constituted a change order. (Tr. at 3124-25.)

369. The claim that the spider deck represented a change in the responsibilities of the P-19 Consortium that required a change order and additional compensation is not justified by the facts and is refuted by the way in which the parties treated the addition of the spider deck at the time. The P-19 Consortium was not entitled to a change order or additional compensation for the spider deck.

ETC 20

370. On May 17, 1995, the Petrobras Defendants issued ETC 20, which reduced the oil import capacity of the platform by 50,000 barrels a day, to 100,000 barrels a day. (PB-667 at 2, 5; Tr. at 3136.) This change was the result of a decision to station another FPSO in the Marlim field. (Tr. at 2557, 3136, 3138; S-178 at 2, 5.) The result was to reduce the equipment required on P-19. (Tr. at 4049-51, 4062.) This change was made early in the project. (Id. at 4142.) The change required the Consortium to devote additional engineering hours to modifying the basic design of the project, but did not result in any delays to the project. (Id. at 4050-51; PB-575 item 2.)

371. The cost of ETC 20 was covered in Amendment Two to the Contract, which included any and all impact costs. The impact costs of ETC 20 were known by the time the change orders were negotiated on December 9, 1996. In the negotiations that resulted in Amendment Two, The P-19 Consortium and Brasoil agreed that Brasoil was entitled to a credit of over \$1,500,000 for equipment that was eliminated or downsized. (PB-134 item 18; Tr. at 4049-50.) Amendment Two also made allowance for additional design costs. (PB-134 items 13-14; Tr. at 4049-50.)

ETC 31

372. On June 23, 1995, the Petrobras Defendants issued ETC 31, which requested the P-19 Consortium to conduct a simulation of the process plant based on a revised estimate of the production from the Marlim field. (S-1091; Tr. at 3141.) Petrobras and the Consortium agreed that until the results of the simulation were available the Consortium would continue to issue engineering documents for procurement based on the existing estimates, and that Petrobras would be responsible for any risk resulting from changes, if they occurred. (Tr. at 3142.) IESA performed the simulation as a subcontractor to the Consortium; there were delays resulting from IESA's work and the analysis was not available until August, 1995. (Id. at 3143; PB-1054 at 5.)

373. On August 15, 1995, IESA reported the results of the simulation done in accordance with ETC 31. (PB-1054 at S-17.) The report indicates what changes would have to be made in equipment purchases. (Id.) As a result of ETC 31, the Petrobras Defendants and the Consortium agreed to change the requirements for nine pieces of process equipment (out of 29 total). (Tr. at 3144, 4126.)

374. Contrary to the contention of the Sureties, ETC 31 did not turn the first 133 days of the project into wasted days. (Id. at 4126, 4129.) Some design time stretched out but the impact was covered by Amendment Two to the P-19 Contract, which added 60 days to the contract term. (Id. at 4130.)

The TEG Unit

375. In July or August, 1995, Petrobras decided to increase the number of glycol unit (TEG) contactor towers from one to three, so that there would be an individual tower for each of the turbocompressors. (Tr. at 3162-63.) The platform's installed capacity would thus be increased to one million cubic meters per turbocompressor per day for a total of three million cubic meters per day; the nominal capacity, however, remained at two million cubic meters per day, since one turbocompressor would be on standby at any given time. (Id. at 3163.) Petrobras undertook most of the design work resulting from this change. (Id. at 3165.)

376. To avoid any delays in procurement, Petrobras authorized the Consortium to proceed with ordering the TEG unit with only one tower while Petrobras finalized design work. (Id. at 3164-65.) On December 29, 1995, the Consortium, acting through Mustang, issued a purchase order to BS & B Process Systems, Inc. ("BS & B") for a single-tower TEG Unit to be delivered on July 27, 1996. (PB-1066; Tr. at 3167.) A revised purchase order for a three-tower unit was issued to BS & B on January 26, 1996, on completion of the design work, and specified a delivery date of August 3, 1996. (PB-1065.)

377. The Petrobras Defendants paid the additional costs resulting from the changes to the TEG unit under Amendment Two to the P-19 Contract. (Tr. at 3197-3199; PB134 item 1.) The deck area required for the three tower TEG unit was one foot smaller than the original area planned for. (Tr. at 4136.) The revised delivery date was only one week later than the original date. (PB-1065.)

378. Problems between the P-19 Consortium and BS & B caused the delivery date of the TEG unit to be delayed. (Tr. at 3337-39.) Eventually, BS & B suspended work on the TEG unit because of nonpayment. (Id. at 4109.) The TEG unit did not arrive at the shipyard until June 20, 1997. (Id. at 4109, 4132.) These delays were the fault of the Consortium. (Tr. at 4133-34.)

The Pull-In System

379. The Contract documents specified that the P-19 platform was to employ a "dry pull-in system" for risers. (PB-279 at 427-28; Tr. at 2523.) Risers are the pipe-like connections between the oil and gas wells on the bottom of the ocean floor and the platform. The dry pull-in system meant that the platform was to be designed with sufficient buoyancy so that the platform could be raised from time to time to expose the riser connections at the top of the pontoons. (Tr. at 3150-51.) As the Consortium received information on the weight of the process equipment to be deployed on the P-19 platform, it became clear that the platform lacked the necessary buoyancy to meet this contractual specification without the addition of extensive pontoon sponsons (floatation chambers). (Id. at 3151.)

380. As a concession to the Consortium, the Petrobras Defendants agreed to waive the requirement for a dry pull-in for the risers on the P-19 platform. (PB-1167 item 4; Tr. at 3154-55, 3221.) This eliminated the need for sponsons and simplified the design of the platform. (Tr. at 3154-57.) The change reduced the amount of steel and rigid piping required. (Id. at 3156-58.) As of the time the dry-pull requirement was waived, the Consortium had not yet purchased the steel for the sponsons. (Id. at 3157-58.)

381. The parties agreed to a zero cost for the change in the riser pull-in system at the December 9, 1996 meeting where the negotiations on change orders were finalized. (PB-134 item 17.) The parties noted in the minutes that the change in the riser pull in system "may be addressed/treated as being the result of developing the design in order to comply with the operational/functional requirements of the platform, and thus not considered by the parties to be a change in design." (Id.) The change in the pull-in system did not constitute a change order under the Contract. (Id.; Tr. at 3157-38, 3221.)

The Mooring System

382. At the request of the Petrobras Defendants, the platform was changed from a catenary mooring system to a taut leg mooring system. (Tr. at 3159.) The taut leg system used synthetic cable line instead of steel cable and suction piles instead of anchors. (Id. at 2472-73, 3159; S-1215.)

383. The change in the mooring system had no impact on other work being done on the platform. The Petrobras Defendants designed and developed the taut leg mooring system (S-1215), which reduced the scope of the Consortium's work (Tr. at 3160). The parties agreed to a zero cost in the December 9, 1996 meeting minutes. (PB-134 item 7.)

Crew Accommodations

384. The P-19 Consortium assumed that the existing crew accommodation spaces on the Treasure Stawinner could be used as the P-19 platform's crew quarters without change. (Tr. at 1948-49.) In so doing, the Consortium ignored the specifications in the Contract requiring an individual bathroom for each crew room. (PB-279 at 0402; Tr. at 1948-49, 3158.) The Consortium was not entitled to additional compensation for work done on the living quarters other than as agreed in Amendment Two because the work was within the scope of the Contract.

"As New" Work

385. The P-19 Contract afforded the Consortium the option to bring existing equipment on board the platform to "as new" condition in lieu of replacing such equipment with new equipment. (PB-279 at 620 § 3.4; Tr. at 2982.) All the production equipment had to be purchased new. (PB-279 at 620 § 3.3.)

386. Section 3.4 of Annex IX to the Contract required the Consortium to submit a detailed report to Brasoil by the first month after the award of the Contract on the existing equipment to be refurbished. The report was to list all the items to be restored, the scope of the work to be carried out, and the activity schedule for the work. (PB-279 at 620.)

387. Brasoil had the right to comment on the "as new" list and procedures with all conflicts "being resolved to the satisfaction of Brasoil, taking into account that an `As New Condition' is required." (Id. § 3.4.1.) After approval of the list, Brasoil reserved the right to request the renewal of items previously regarded as "feasible of recuperation," without any extra charge or reimbursement costs, in an agreed time, whenever the dismantling of the item shows up a serious defect. (Id. § 3.4.2; Tr. at 2981.)

388. The Consortium underestimated the quantities and costs required to satisfy the "as new" requirements of the contract. (S-402 ¶¶ 12-13; Tr. at 2056, 3215, 3412, 4091.)

Brasoil Did Not Fundamentally Change the P-31 Project, Interfere with Construction, Make Excessive Changes, Fail to Recognize Change Orders, Fail to Grant Extensions of Time or Otherwise Breach the P-31 Contract

389. The changes made during the course of the P-31 Project were commensurate with a project of this size and complexity in the offshore industry. (Tr. at 4038, 4336-37, 4356-57.)

390. There were approximately 80 design changes on the P-31 Project in total. (Id. at 4141.) Only three of these changes were major changes: an increase in the voltage and capacity of the electrical system, an increase in the capacity of the crew accommodations from 40 to 100 personnel, and a change from in-hull to on-deck separation of oil received from the P-25. (Id. at 3452-53, 3459-60, 3498-99, 4140-41.)

391. The performance specifications and function of the FPSO remained unchanged throughout the course of the project. P-31 was designed and built to produce 100,000 barrels of oil a day and to process additional quantities of oil and gas. (JS ¶ 236, Tr. at 2163, 3640, 4465.)

392. Section 10.2 of the P-31 Contract provided that within seven days from the date that Brasoil requested a change order, the Consortium was required to submit a report showing the quantity of the services involved and the respective prices. The prices were to be calculated in accordance with the unit price schedules set forth in Annex VIII to the Contract; if such a calculation was impossible, the Consortium was to take into consideration the market price for work of the same kind. (PB-820 at 509.)

393. On the P-31 Project, requested changes in scope were formalized as Pedidos de Alteração de Escopo ("PAEs"). (Tr. at 2215, 2258-59; see, e.g., PB-1404 at 37-89.) PAEs were issued by both Brasoil and the P-31 Consortium. (JS ¶ 238; Tr. at 2222-23, 3453.) PAEs were to take into account all direct and indirect costs associated with a change, including impact costs. (Tr. at 3449, 3454.) The Petrobras Defendants would not recognize any PAE that was not supported by detailed backup documentation, including prices of equipment and the man hours spent on the change. (Id. at 2316.) The Consortium kept detailed records showing the basis for its claims for change orders. (Id. at 2220.)

394. There were 76 PAEs issued by Brasoil and 95 PAEs issued by the P-31 Consortium from November, 1995 to December, 1997, when the Consortium was removed from the project. (PB-265 at 13-16; PB-1114; Tr. at 2228-30.)

395. The Petrobras Defendants and the P-31 Consortium met several times in December, 1996 to negotiate the PAEs pending at that time. (Tr. at 2343, 3501-02.) On December 3, 1996, the Consortium and the Petrobras Defendants agreed on certain criteria that would govern recognition of the outstanding PAEs. (PB-1407.) On February 3, 1997, the Consortium and the Petrobras Defendants adopted Amendment Three to the P-31 Contract (PB-820 at 1557-60), which had an effective date of December 19, 1996-the date that the Petrobras Diretoria had approved the Amendment (S-372A). Amendment Three recognized approximately 40 PAEs and accordingly increased the contract price by \$16,968,846.48. (PB-820 at 1557, 1560.) Amendment Three also extended the project's completion date by 93 days. (Id. at 1557.) In the Amendment, the Consortium and the Petrobras Defendants specifically ratified all the terms and conditions of the original contract and Amendments One and Two thereto, except as changed by the Amendment. (Id. at 1558.)

396. 86 of the 95 PAEs issued by the Consortium were issued after July 7, 1997 — that is, after the Sureties' representatives established contact with Alarico de Castro, the P-31 Consortium's project manager. (Tr. at 2227-30.) The PAEs issued after July 7, 1997 were plainly part of the litigation effort of the P-31 Consortium and the Sureties.

397. The total value of negotiated PAEs plus the fair value of unresolved PAEs, including all appropriate impact costs, amounted to \$21,251,375, or approximately 13% of the original contract price. Tr. at 3807, 4029-30, PB-1114.)

398. The 93 day extension of time in Amendment Three to the P-31 Contract was sufficient to compensate for the design changes made during the course of the project. (Id. at 4142.)

399. Certain technical aspects of the P-31 Project are discussed in more detail below.

400. In the process of developing detailed designs for the P-31, the Consortium identified the project's need for a higher-voltage electrical system than the Vidal's existing system. (Tr. at 4352-53.) Brasoil documented the change in the system via PAE 19, which was issued on October 1, 1996. (PB-1404.) The parties agreed that the value of the change was \$8,069,795.35. (Id. at 3; Tr. at 2336-38.) That amount was included in the approximately \$17 million increase in the contract price approved in Amendment Three to the P-31 Contract (PB-820 at 1560.) While the change did cause some delay, any delay caused was taken into account by the 93 day extension, and the electrical system did not impinge on the scheduling of the project as a whole. (Tr. at 2825-26, 4142)

401. On February 15, 1996, early in the project, Brasoil issued PAE 6, which changed the P-25 oil separation system. (Id. at 3498-99.) The total negotiated cost of the change was \$674,448. (PB-820 at 1650.) This change was also included in Amendment Three to the Contract. (Id.)

402. Petrobras decided to expand the living quarters from 44 persons to 60 persons three weeks after the P-31 Contract was signed. The expansion was effected through a series of PAEs. Petrobras issued a second series of PAEs in September 1996 that again expanded the accommodations, from 60 to 100 persons. (JS ¶ 240.) The parties negotiated the cost for the increase in crew accommodations and the related increases to air conditioning, galley, and refrigerators. (Tr. at 3460-61.) The total price for the

various changes related to accommodations (PAEs 2, 3, 11, 34 and 39) was \$1,884,701. (PB-820 at 1650.) This increase was also included in Amendment Three. (Id.) The modifications to the crew quarters had negligible impact on the progress of the work and did not warrant an extension of time. The changes did not enlarge the boundaries of the living areas or create a need for structural modifications. (Tr. at 3460.)

403. The Sureties have contended that additional costs were incurred on the P-31 Project because Petrobras objected to the supply of cranes by Titan Industries, Inc. ("Titan"). However, Petrobras was justified in not agreeing to the provision of the cranes by Titan because Titan had indicated that it would provide a crane with an open loop hydraulic system, rather than the closed loop system specified by the contract. (Id. at 3480-81.) Although Titan eventually offered to provide a crane with a closed loop system, Titan had minimal, if any, experience with such systems and Brasoil was not required to accept a prototype system. (Id. at 2329-31.)

404. There were several changes that related to the turret. The Petrobras Defendants altered the P-31 riser arrangement after Sofec, the P-31 subcontractor that provided the turret, had completed its initial design. (Id. at 3444-AS.) This change was discussed by the Petrobras Defendants, the P-31 Consortium, and Sofec in April-May 1996. (Id. at 2203; PB-807.) Pursuant to those discussions and PAE 18, Brasoil agreed to pay Sofec \$940,000 to resolve claims related to design changes and delays. (Tr. at 3444-47; PB-820 at 1650.) The Petrobras Defendants also required early delivery of a part of the turret called the moonpool. (Tr. at 4337-48.) This change was reflected in PAE 41, which the Consortium and the Petrobras Defendants valued at \$947,000. (Id. at 3448-49; PB-820 at 1650.) The additional amounts due to changes to the turret were included in Amendment Three to the Contract. (PB-820 at 1650.)

Accounting Issues

405. By letter dated February 11, 1998, Almir Barbassa, a director of Braspetro, wrote to SEFIN deputy superintendent Marcos Menezes requesting that Petrobras sign a letter agreeing to make Brasoil whole for the cost overruns incurred in connection with the P-19, P-31, and P-34 contracts if those amounts could not be recovered under the performance bonds or under the letter agreements signed with the Consortia. (S-757.)

406. Mr. Barbassa indicated that the letter was necessary so that Brasoil could reflect the cost overruns on its 12/31/1997 financial statements as investments in platforms rather than as account receivables

owed by the Consortia. In view of the questionable nature of the Consortia's finances, Brasoil would be required to establish a provision for losses on the accounts receivable due from the Consortia if a parent company guaranty could not be obtained from Petrobras. (Id. at 2.) Moreover, the letter of guaranty had to be issued immediately because Braspetro's and Petrobras' accounting statements had already been prepared on the assumption that the letter would be received. (Id.) If the letter of guaranty were not signed, Braspetro's financial statement would not be ready for submission to the Administrative Council the following day. (Id. at 2, 4.)

407. Mr. Quintella signed the letter of guaranty on behalf of Mr. Alceu. The letter states on its face that Petrobras had incurred cost overruns for "operational improvements" and "emergency measures taken as a result of the contractors' inefficiency." (S-758A.) The portion attributable to operational improvements was to be the subject of an analysis. (Id.)

408. The letter was issued for the specific purpose of sparing Brasoil from reflecting substantial losses on its balance sheet which would undermine Brasoil's usefulness to Petrobras as a vehicle to arrange international financing. The letter was prepared by Braspetro's accounting department, which did not have firsthand knowledge of the projects. (S-757 at 3.) The letter was not intended to be and was not an analysis of the reasons for the cost overruns.

409. Mr. Menezes testified that the term "operational improvements" meant "expenses incurred by Brasoil that had not been included in the contract and its amendments but were required for completing the construction of the platforms." (Tr. at 3758.) In other words, the term was used to refer to the funds required to meet the obligations that had been assumed by the Consortia. The term "operational improvements" is not an accounting term. (Id. at 3757.)

410. The fact that Petrobras guaranteed that it would pay for any amounts that were expended by Brasoil in excess of the contract price and that could not be recovered from IVI or the Sureties is strong evidence that Petrobras was the moving force behind that the administration of the contracts. However, that fact does not indicate that Petrobras was a joint venturer with the Consortia, as opposed to Brasoil.

411. In some of the post-default documents accountants for Brasoil characterized substantial expenditures as "extracontractual." (S-1483; S-1487.) The Petrobras Defendants contend that these references describe amounts that were in excess of the financing provided under the Marubeni Loan

Agreement for the P-19 Project and the Nisho Iwai Loan Agreement for the P-31 Project. (Petrobras Defendants' Proposed Findings of Fact ¶ 520.) There is no evidence what specific contracts are being referred to in the documents in connection with the term "extracontractual." But in any event, contrary to the assertion of the Sureties, the way in which the accountants for Brasoil characterized the various expenditures on the books of Brasoil does not change the character of the expenditures for determining whether they were for valid expenses under the P-19 and P-31 Contracts.

The Petrobras Defendants Were Not Partners of or Joint Venturers with the Consortia

412. The Sureties allege in the Indemnity Action that Petrobras can be held liable under theories of partnership, alter ego, instrumentality and/or domination for the obligations of IVI, Sade Vigesa and IESA under certain indemnity agreements. In essence, the Sureties attempt to hold Petrobras responsible for any amounts the Sureties may owe Brasoil under the Performance Bonds. The evidence fails to support the Sureties' allegation.

413. On August 19, 1994, Sade Vigesa S.A., Sade Vigesa Corporation of America and Sade Vigesa (Chile) S.A. entered into a standard indemnity agreement in favor of USF & G. (S-6.) The stated amount of the indemnity was \$200 million. (Id. ¶ 21.) Neither Petrobras nor Brasoil was a party to this agreement.

414. On February 17, 1995, Sequip, IVI and Sade Vigesa executed a standard indemnity agreement in favor of the Sureties. (PB-592.) The limit of the indemnity was \$500 million. (Id. ¶ 21.) Neither Petrobras nor Brasoil was a party to this agreement.

415. On March 22, 1996, Inepar Administracào e Participacòes S.A. and Inepar Industria e Construcoes S.A. executed a standard indemnity agreement in favor of USF & G. (S-195.) Neither Petrobras nor Brasoil was a party to this agreement.

416. There is no evidence that the Sureties relied on Petrobras' supposed status as an implied or de facto partner of Sequip, IVI, Sade Vigesa, IESA and/or the Consortia in entering into the various indemnity agreements or in issuing the performance bonds which are the subject of this action.

417. There is no evidence of any overlap between the bank accounts, officials, or boards of directors of Sequip, IVI, Sade Vigesa, and IESA, on the one hand, and the Petrobras Defendants, on the other. (See Tr. at 509-10, 2170.)

418. Sequip, IVI, Sade Vigesa and IESA were managed by sophisticated businessmen accustomed to dealing with multi-million dollar construction contracts, and made use of professional advisors such as investment bankers. (Tr. at 505-506, 509, 1046.)

419. The Petrobras Defendants did not take any of the formal steps required under Brazilian law to become a member of either the P-19 Consortium or the P-31 Consortium. They did not sign the consortium agreements or register with the authorities as required by Brazilian Law 6404 of December 15, 1976. (Cf. PB-852; PB-854; PB-855.)

420. There is no evidence that the Petrobras Defendants held themselves out to third parties as partners of or joint venturers with Sequip, IVI, Sade Vigesa, IESA and/or the Consortia. While Mustang and other third parties looked to guarantees and comfort letters from Petrobras, those assurances were given by an entity that was plainly distinct from the Consortia that were the contractors on the projects.

421. The relationship among the Petrobras Defendants and Sequip, IVI, Sade Vigesa, IESA, and/or the Consortia was at all times an arm's length relationship of owner and contractor. (Tr. at 362, 1677, 2031; PB-256.)

422. The Consortia managed the work on the projects at the job site. (Schmidt Tr. at 3335:6-3336:12.) While the Sureties complain about the number of Petrobras employees at the job sites, the Contracts gave Brasoil the right to have supervisors at the job sites and even provided for adequate accommodations for them. Given the value and complexity of the projects, their importance to Brasoil and Petrobras, and the importance of assuring safety and conformity with contractual standards, it was wholly reasonable for Petrobras to post supervisors on site. There is no credible evidence that, given the scope of the projects, the number of supervisors, or their functions became so great that the supervisors could be found to have taken over the control of the projects from the Consortia.

423. The Consortia were at all times free to stand on their rights under the relevant Contracts and refuse Petrobras demands that went beyond the scope of the contract or constituted an interference with the Consortia's management of the project. In the event of an owner breach, the Consortia could have declared Brasoil in default and sought relief in the courts.

424. Before the Sureties' American counsel became involved in the negotiations in January 1997, there is no evidence that the Consortia complained, either to the Petrobras Defendants or to the Sureties, that Petrobras was not properly carrying out its function with respect to the contracts or was exceeding its proper role. The Consortia communicated frequently with the Sureties prior to 1997, and no contemporaneous document suggests that Brasoil or Petrobras had dominated or controlled the Consortia, had replaced the fixed price contracts with an agreement to fund IVI's costs, or had instituted any fundamental changes to the projects. (See, e.g., PB-56; Tr. at 1429.)

425. There was no agreement among the Petrobras Defendants and Sequip, IVI, Sade Vigesa, IESA and/or the Consortia to establish a partnership or joint venture. (PB-256; S-1461 ¶ 30.)

426. There is no evidence that thee Petrobras Defendants and Sequip, IVI, Sade Vigesa, IESA and/or the Consortia held or acquired property in common.

427. There is no evidence that the Petrobras Defendants and Sequip, IVI, Sade Vigesa, IESA and/or the Consortia agreed to share profits or losses. The Petrobras Defendants certainly had no intention to share any of the proceeds from the oil to be produced by the platforms with the Consortia or their constituent members; the Consortia had no intention of sharing any profits with the Petrobras Defendants; and there was no agreement to share any losses.

428. The relationship among the Petrobras Defendants and the Consortia was governed by the P-19 and P-31 Contracts.

429. There was no community of interests or assets among the Petrobras Defendants and Sequip. IVI, Sade Vigesa, IESA, and/or the Consortia. Indeed, the record reflects extensive, arm's length negotiations among the parties as to what changes were to be made in the Contracts and what was to be paid for those changes. (Tr. at 2343, 3333-34, 3501-2, PB-134, PB-496, PB-1407.)

430. The Petrobras Defendants did not make indiscriminate use of the expressions "we" or "our" in commercial documents.

431. The Petrobras Defendants did not receive or answer correspondence addressed to the Consortia or to a partnership.

432. The Petrobras Defendants did not use a common business name or trademarks with the Consortia. Any use of the P-31 Consortium name after the removal of the Consortium from the project on or about December 4, 1997 was inadvertent and insignificant.

433. The Petrobras Defendants were merely protecting their interests as owner by requiring their approval for withdrawals from the blocked accounts. Until late April, 1997, the funds in the blocked accounts had been earned by and belonged to the Consortia.

Marubeni

434. Closely related to the other issues in these cases are issues concerning the alleged tortious interference by Petrobras with various agreements among Brasoil, IVI, and Marubeni America Corp. ("MAC"). This alleged tortious interference forms the basis for Count 9 of the Sureties' Amended Complaint in the Indemnity Action. The allegations in this claim are set out at length in a prior decision of this Court. See United States Fidelity & Guaranty Co. v. Petroleo Brasileiro S.A.-Petrobras, No. 98 Civ. 3099, 2001 WL 300735, at *8, *20, *23-24 (S.D.N.Y. March 27, 2001), familiarity with which is assumed.

435. In order to provide financing for the P-19 Project, IVI and MAC negotiated a \$38 million loan (the "MAC Agreement") whereby MAC nominally "sold" equipment (the "Financed Equipment") to IVI for periodic installment payments, coinciding approximately with the periodic progress payments to be made by Brasoil to the P-19 Consortium for the Consortium's work on the P-19 Project. (S-7004.) The Financed Equipment was actually supplied by other vendors. (Id. at 9-12.)

436. As primary security for IVI's payment obligation to MAC, in an agreement dated June 30, 1995 (the "Assignment of Receivables"), IVI assigned to MAC up to \$52.5 million of its future receivables from

Brasoil under the P-19 Contract. (S-1095.) The Assignment of Receivables defines "IVI Receivables" as "all periodical or other payments and all other moneys and claims for moneys from time to time due or to become due to [IVI] by Brasoil under [the P-19 Contract]," up to the \$52.5 million limit. (Id. § 1.2.) As further security, Brasoil consented to the Assignment of Receivables by executing a document (the "Notice of Assignment") which informed Brasoil of the fact that IVI Receivables, as defined in the Assignment of Receivables, had been assigned to MAC. (S-87A.) The Notice of Assignment also authorized and instructed Brasoil to pay specified IVI Receivables "due and payable to IVI" directly into an escrow account in Houston as such amounts became due. (Id.) Finally, as additional security for the transaction, IVI obtained the MAC Payment Bond, a labor and materials payment bond issued on July 21, 1995 by the Sureties for the amount of \$38 million, in favor of Brasoil as owner, for the benefit of MAC as the defined "claimant." (S-7002.)

437. IVI made its payments to MAC through April, 1997. On April 23, 1997, representatives of MAC met with Paulo Marcio Mauro, the P-19 Project manager for Petrobras, and American counsel for Petrobras. (S-543; Tr. at 861-62, 877-79, 882-83.) There was a discussion of the fact that the P-19 Contract was in default and that Petrobras/Brasoil would be declaring a default on the Contract and making a claim under the P-19 Bond, but that the Sureties would resist payment in court and it would take five years to collect under the Bond. (S-543 at 2-3.) There was also discussion of MAC making a claim under the MAC Payment Bond, if the amount due at the end of April were not paid. (Id. at 6.) The MAC representatives indicated that they would consider the appropriate actions for MAC and would handle the situation by making a claim under the MAC Payment Bond, and if MAC were not confident of obtaining payment, it would seek payment from the final scheduled disbursement of the proceeds of the "Mother Loan" that Marubeni Corp. ("Marubeni"), MAC's Japanese parent, had made to Petrobras. (Id. at 4.) The final Mother Loan disbursement was due in August, 1997. (Id. at 6; S-563 at 4.)

438. MAC prepared and sent to Petrobras on May 6, 1997 a draft Memorandum of Agreement which reflected that MAC would file a claim under the MAC Payment Bond and that Marubeni would make the final installment on the Mother Loan to MAC. (s-563.) This proposed agreement was, however, never signed and there is no evidence of any binding agreement between Marubeni, MAC, Petrobras, Brasoil, or any combination of them with respect to making a Payment Bond claim or any resulting reimbursement for MAC or Marubeni. (Tr. at 787; S-1397.) In a May 16, 1997 letter, Petrobras did ask Marubeni to waive the "failure of Borrowing conditions" under the Mother Loan that resulted from the defaults by the P-19 Consortium, and also requested that Marubeni disburse the remaining amounts under the Mother Loan so that the funds could be available to complete the P-19 Project and to satisfy the claim of MAC. (S-600A.) The letter, which fell short of a commitment by Petrobras, provided: "Our current intention is to complete the P-19 Vessel without replacing the Consortium contractor. We will

both be pursuing our rights under the applicable Performance Bond, and, if necessary, providing additional financial support in order to complete the P-19 Vessel." (Id.)

439. Petrobras initially refused to allow IVI to make its April 30, 1997 payment to MAC through the blocked accounts. (Tr. at 998.) MAC then issued notices of default and acceleration. (S-595.) But on May 14, Petrobras signed off on the payment, just in time to cure the default and prevent acceleration of the debt by MAC. (Id.; Tr. at 802-04.) On June 12, 1997, Petrobras approved the payment of the May 30 MAC installment. (S-667 at 2; Tr. at 1932-33.)

440. Thereafter, however, Petrobras refused to release the money for the MAC installment from the blocked accounts. (Tr. at 1930-1935; S-615; S-688.) On June 3, 1997, MAC sent the Sureties notice of IVI's May 30 default. (S-628.)

441. IVI urged Petrobras to consent to the MAC payment. (S-639.) When that consent was not forthcoming, IVI wrote to MAC directly on July 23, 1997, offering to return the Financed Equipment in order to satisfy IVI's debt. (S-688.) On the same day, Dr. Fischel wrote to Mr. Alceu of Petrobras, again requesting Petrobras to allow IVI to pay MAC from the blocked account. (S-689.) The following day, Petrobras's American counsel wrote to MAC's American counsel, advising MAC that the Financed Equipment was the sole property of Brasoil and was not available for return to MAC. (S-690.)

442. The major equipment at issue, the generator and compressor, had already been installed on the P-19 platform. (Tr. at 867.) Under the P-19 Contract, the Financed Equipment was the property of Brasoil and was not subject to being ripped out and returned to MAC. (PB-279 t 209 § 3.23; Declaration of Paulo Cezar Aragao, dated April 2, 2002 ("Aragao Decl."), at 90-92.)

443. MAC refused to accept the tender of equipment. (Tr. at 860.)

444. In September 1997, MAC commenced an action in the Supreme Court of the State of New York, New York County. Marubeni America Corp. v. United States Fidelity & Guaranty Co., No. 604801/97 (the "MAC Action"). In the MAC Action, MAC sought recovery against the Sureties under the terms of the MAC Payment Bond. (JS ¶ 116.) 445. The Sureties defended on various grounds, including a claim that MAC and Petrobras entered into an agreement whereby MAC would make a claim under the MAC Payment Bond and MAC would not take any action against IVI. The State Court rejected the various claims by the Sureties. In doing so, the court expressly found: "[T]he evidence indicates that the IVI receivables were already exhausted by the date of the alleged conspiracy [in April, 1997]." Marubeni America Corp. v. United States Fidelity & Guaranty Co., No. 604801/97, slip op. at 9 (N.Y.Sup.Ct. Jan. 7, 2000) ("MAC"), aff'd, 280 A.D.2d 269, 721 N.Y.S.2d 6 (N.Y.App.Div.), lv. to appeal denied, 96 N.Y.2d 712, 729 N.Y.S.2d 439, 724 N.E.2d 199 (2001). On January 14, 2000, the court in the MAC Action entered judgment against the Sureties in the amount of \$12,886,263.54. (JS ¶ 117.) That judgment was ultimately affirmed by the Supreme Court of the State of New York, Appellate Division, First Department, and in May, 2001, the New York Court of Appeals denied the Sureties' request for leave to appeal. (Id.)

446. Thereafter, the Sureties satisfied MAC's judgment against them by paying MAC the amount of its judgment, together with post-judgment interest, a total \$14,446,383.46. (JS ¶ 118.)

447. As the ultimate parent company and the representative of Brasoil for the projects, Petrobras had an economic interest in the decision whether to pay the amounts owed by IVI to Marubeni America Corp. ("MAC").

448. Petrobras did not act with malice, or with fraudulent or illegal means in advising Brasoil with respect to the payments owed by IVI to MAC.

449. As the New York State Supreme Court found, and as the evidence in this case amply demonstrates, by April, 1997 the IVI Receivables were exhausted, and no further funds were due to IVI under the defaulted P-19 Contract. MAC, slip op. at 9. In addition, there was no agreement that Petrobras or Brasoil would pay all of the expenses of the P-19 Consortium, and any funds owed to MAC in particular. Moreover, when asked to sign any agreements that would have guaranteed payments to MAC, Petrobras declined to do so.

450. The balance of the P-19 Contract had been exhausted prior to the time that the delinquent May 30, 1997 installment payment to MAC was due. Moreover, the Sureties have already litigated that issue and lost; they are collaterally estopped from re-litigating this issue here.

451. The collection of the IVI Receivables was strictly an issue between MAC and IVI. (Tr. at 784.) MAC was a financier to IVI, not a supplier of equipment to the P-19 Project. (Id. at 323.) Brasoil was under no obligation to provide funds to IVI so that it could pay the MAC installment payments. There was no guarantee of any kind by Petrobras or Brasoil to pay MAC for all of its financing. (Id. at 300-01, 305-06, 838-40, 859-60, 889; S-1396.)

452. After no later than April 23, 1997, the funds in the blocked accounts belonged to Brasoil, not to IVI.

453. Brasoil had already paid for the Financed Equipment as part of the original Contract price. Brasoil was under no obligation to pay for the equipment twice by repaying the MAC loan on behalf of IVI.

454. Neither Brasoil nor Petrobras interfered in any way with IVI's ability to repay MAC. IVI could have used its own funds or raised money from other sources in order to pay the installment due to MAC.

455. IVI did not have an agreement with MAC that MAC would accept the tender of the Financed Equipment in lieu of payment under the MAC Agreement; as the New York State Supreme Court found, "MAC simply had no duty to accept a tender of the equipment in lieu of payment...." MAC, slip op. at 10. The Sureties have already litigated this issue against MAC and lost; they are collaterally estopped from re-litigating this issue here. Id. at 9-10.

456. MAC decided on its own that it was "not obligated" to take equipment off the P-19 rig, even after the Sureties demanded that they do so. (Tr. at 817-18.) Further, the decision whether to litigate against the Sureties in order to collect on the payment bond was MAC's exclusive decision. (Id. at 784-85.)

Damages

457. The adjusted value of the P-19 Contract after due allowances for unrecognized change orders and unit price work was approximately \$181,225,000. (Tr. at 3833.) Among other adjustments, this figure takes into account \$2,204,621 in credits to Brasoil based on reductions in the scope of work as agreed at the December 9, 1996 meeting (PB-134 at 5), as well as a \$660,000 credit to the Consortium for valid, unrecognized change orders (Tr. at 4044-48).

458. Brasoil spent approximately \$279,885,000 in verifiable costs on the P-19 Project from start to completion. (Tr. at 3833.) The cost overrun was \$98,660,934. (Id.)

459. The Petrobras defendants argue that this cost overrun is the proper measure of damages. However, Mr. Hamilton also testified that only \$58 million of the actual costs of the project were spent from May 12, 1997, the date of the notice of default, though the date of the last P-19 Project expenditure that he analyzed, which occurred in April, 1998. (Tr. at 3834.) As explained above, the Sureties' obligations under ¶ 4 of the P-19 Bond were conditioned on Brasoil's compliance with ¶ 3 of the Bond, including the requirement that Brasoil declare a Contractor Default. (S-72A.) Thus, before May 12, 1997, the Sureties were not obligated to perform the remainder of the contract, arrange for its completion, or determine the amount for which they may have liable to Brasoil and tender payment. (Id.) The damages suffered by Brasoil arise from the failure of the Sureties to perform after the Contractor Default was declared. Accordingly, the Sureties are not liable for the project costs that Brasoil paid prior to the declaration of default.

460. This approach to damages is consistent with the language of the Bond, which identifies "the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract" as the primary measure of damages for which the Sureties may be liable (up to the limit of the amount of the Bond.) (Id. ¶ 6.1.) It is also consistent with the advice that the Petrobras Defendants received from Johnson & Higgins, an insurance brokerage firm, as early as January, 1997. At that time, Johnson & Higgins advised the Petrobras Defendants that the obligations of the Sureties under the Performance Bonds did not arise until a Contractor Default was declared. (S-424 at 4.) The Petrobras Defendants were not prepared to declare a default under the P-19 Contract at that time because of the interference with the orderly progress of construction on the vessel. (Id.) That was a choice that the Petrobras Defendants, since damages are limited to the costs that were incurred after the default was declared and the Sureties refused to fulfill their obligation to either perform the remainder of the Contract or pay the damages resulting from their failure to do so. In the case of the P-19 contract, those costs were \$58 million. Tr. at 3834.)

461. Under ¶ 6.3 of the P-19 Bond, Brasoil is entitled to recover liquidated damages, as specified in the Contract, for delayed performance or non-performance of the Consortium. (S-72A.) The extended completion date of the P-19 Contract was September 21, 1997. (JS ¶ 146.) Sections 9.1 and 9.5 of the P-19 Contract provide for liquidated damages of 0.1% of the lump sum Contract price for each day of unexcused delay, up to a maximum of 20% of the lump sum price. (PB-279 at 222.) Because the stated

lump sum price was \$163 million, there were delay damages of \$163,000 per day up to a total of \$32,600,000. (Id. at 218 § 5.1.1.)

462. The liquidated damages provision was reasonable in view of the substantial revenue from oil and gas production that would be lost if the project was delayed. (See Tr. at 4458-59, 4465-66, 4468.)

463. The maximum amount of liquidated damages was accrued on April 9, 1998, 200 days after the September 21, 1997 extended completion date. Because it is clear that the Contract was not completed prior to that date, and because the P-19 Consortium was responsible for those delays, Brasoil is entitled to recover \$32.6 million in liquidated damages.

464. Brasoil's total damages for P-19, including liquidated damages, amounted to \$90,600,000. In accordance with ¶ 6.2 of the P-19 Bond, Brasoil is also entitled to attorneys' fees. The damages, including attorneys' fees, may not exceed the limit of the Bond. (S-72A ¶ 6.) Additionally, Brasoil is entitled to pre-judgment interest.

465. The adjusted value of the P-31 Contract after due allowances for unrecognized change orders and unit price work was \$189,011,915. (Tr. at 3820.) Among other adjustments, this figure includes a credit to the Consortium of \$4,282,529 for all unresolved change orders made after December, 1996 based on the unit prices in the Contract. (Tr. at 4029-30; PB-1114.)

466. Brasoil paid approximately \$305,221,000 in verified costs on the P-31 from start to completion. (Tr. at 3821.) The total cost overrun was \$116,209,776. (Id.) Brasoil actually spent \$121.1 million on the P-31 Project from the June 16, 1997 declaration of default through the last analyzed expenditure on the P-31 Project in November, 1998. (Id. at 3821-22.) While an argument can be made that Brasoil is entitled to the full cost of expenditures on the P-31 Project after the declaration of default, Brasoil seeks only the cost overrun, and its damages are therefore limited to the lower amount of \$116,209,776.

467. It is difficult to determine the completion date of the P-31 Contract for the purpose of calculating delay damages, because the P-31 Consortium was replaced before the project was completed. The Petrobras Defendants argue that the completion date is the date when the P-31 vessel was transferred from SEGEN to E & P — December 31, 1998 — and this date is supported by the testimony of Mr.

McClure, the naval architecture expert for the Petrobras Defendants. (Tr. at 4144.) But that date is an artificial date because it is wholly determined by an internal decision of the Petrobras Defendants, and it is not geared to the completion of the tasks that the P-31 Consortium would otherwise have performed.

468. More useful milestones are available. The P-31's first oil was produced on August 17, 1998. (Id.) The first gas was produced on September 17, 1998. (Id.) The final class certificate was approved by the American Bureau of Shipping on November 24, 1998. (Id. at 4145.) In addition, Brasoil did not make any further expenditures which are attributable to the P-31 contract after November, 1998, and it is therefore unreasonable to set the contract completion after that date.

469. November 24, 1998 is the most reasonable date to find for the date on which the contractual work was completed, given the expenditures through November, 1998, and the fact that the class certificate was obtained on that date. Thus, there was a 224 day delay in the completion of the contract work measured from the extended completion date of the contract on April 14, 1998. Mr. McClure conceded, quite credibly, that about 40 days of the delay was attributable to Petrobras. (Tr. at 4146.) Therefore, there were 184 days of delay for which the Sureties are liable under the liquidated damages provisions of the P-31 Contract and the P-31 Bond. (PB-820 at 508 § 9.1; S-123 ¶ 6.3.)

470. The P-31 Contract includes almost identical provisions for liquidated damages to those contained in the P-19 Contract. (PB-820 at 508 § 9.1.) Liquidated damages amount to .01% of the total contract price (\$163,000,021), up to a total of 20% of the contract price. The amount of damages for each day of delay was therefore \$163,000. The liquidated damages provision was reasonable in view of the substantial revenue from oil and gas production that would be lost if the project was delayed. (Tr. at 4445-48.)

471. Because there were 184 days of unexcused delay attributable to the Consortium, the liquidated damages for the delay amount to \$29,992,000.

472. Brasoil is entitled to recover \$146,201,776 against the P-31 Bond, plus attorneys' fees (total damages not to exceed the limit of the Bond) and pre-judgment interest.

CONCLUSIONS OF LAW

Jurisdiction

1. None of the parties disputes this Court's subject matter jurisdiction over the Declaratory Judgment Action and the Indemnity Action. (Joint Pre-Trial Order § II.) However, the Court has an independent obligation to assure itself of its jurisdiction. Such jurisdiction is plain in this case.

2. For the reasons explained at length in the prior opinion of this Court, and affirmed by the Court of Appeals, this Court has subject matter jurisdiction over the Declaratory Judgment Action against Brasoil pursuant to the Foreign Sovereign Immunities Act (the "FSIA"). 28 U.S.C. § 1330 (a); 28 U.S.C. § 1603; United States Fidelity & Guaranty Co. v. Braspetro Oil Svcs. Co., No. 97 Civ. 6124, 1999 WL 307666 at *7-11 (S.D.N.Y. May 17, 1999), aff'd, 199 F.3d 94, 97-98 (2d Cir. 1999) (per curiam). Petrobras, directly and indirectly through Braspetro employees who serve as Brasoil officers, controls the day-to-day operations of Brasoil to such an extent that Brasoil is the alter ego of Petrobras, which is an "agency or instrumentality" of Brazil, which qualifies as a foreign state under 28 U.S.C. § 1603 (b). United States Fidelity & Guaranty, 1999 WL 307666 at *7-11 Brasoil is not entitled to immunity under the FSIA because of the "commercial activity" exception to such immunity. Id. at *11-14. The evidence at trial has strengthened the conclusions in this Court's pre-trial decisions. The evidence at trial made perfectly clear that Petrobras was making the decisions with respect to the P-19 and P-31 Contracts and the performance bonds. Indeed, Petrobras was making the decisions with respect to the work to be sought under the contracts and the contract amendments to such an extent that Petrobras ultimately agreed to guarantee any payments for such work that Brasoil could not recover from the Consortia or the Sureties. (S-758A.) It was also Petrobras that made the decision to declare the Contracts in default and to make claims under the P-19 and P-31 Bonds. (Tr. at 3282-83.)

3. Brasoil is also not entitled to immunity under the FSIA because it has waived any claim to such immunity. (Joint Pre-Trial Order § II.B.1; see 28 U.S.C. § 1605 (1).)

4. Even if there were no FSIA subject matter jurisdiction, pursuant to recent Supreme Court precedent this Court would have subject matter jurisdiction based on diversity of citizenship. 28 U.S.C. § 1332. The Sureties are citizens of the United States. Brasoil is incorporated under the laws of the Cayman Islands, a British Overseas Territory. United States Fidelity & Guaranty, 1999 WL 307666 at *4; see also JPMorgan Chase Bank v. Traffic Stream (BVI) Infrastructure Ltd., _____U.S. ____, n. 1, 122 S.Ct. 2054, 2056 n. 1, 153 L.Ed.2d 95 (2002) (noting that British territories previously referred to as "Dependent Territories" are currently called "Overseas Territories"). Section 1332(a)(2) provides for district court jurisdiction over all civil actions where the matter in controversy exceeds \$75,000 and is between "citizens of a State and citizens or subjects of a foreign state." Overruling Second Circuit precedent, the Supreme Court

recently held that the United Kingdom's retention and exercise of authority over the British Virgin Islands, another British Overseas Territory, "renders [its] citizens, both natural and juridic, `citizens or subjects' of the United Kingdom under 28 U.S.C. § 1332 (a)." JPMorgan Chase 122 S.Ct. at 2056-57, 2061 (abrogating Matimak Trading Co. v. Khalily, 118 F.3d 76 (2d Cir. 1997)); cf. United States Fidelity & Guaranty, 1999 WL 307666 at *4 (relying on Matimak in concluding that Brasoil was not a "citizen or subject of a foreign state" within the meaning of § 1332(a)). The Japanese Banks are citizens of Japan. (JS ¶¶ 70-71.) Therefore this suit is between citizens of the United States and citizens or subjects of foreign states. Accordingly, § 1332(a)(2) would be another basis for subject matter jurisdiction in this case.

5. The Court has subject matter over the Indemnity Action based on the FSIA. 28 U.S.C. § 1330; 28 U.S.C. § 1603. There is no question, and the parties do not dispute, that Petrobras is an "agency or instrumentality" of a foreign state. Petrobras has waived any immunity it otherwise would have had under the FSIA and has submitted to the jurisdiction of this Court. (Joint Pre-Trial Order § II.B.2; see 28 U.S.C. § 1605 (1).) For the reasons explained at length by the Court of Appeals, and supported by the evidence at trial, Petrobras was in any event not immune: it was subject to the commercial activity exception to the FSIA because it personally, or through its alter ego Brasoil, engaged in acts in connection with a commercial activity that caused a direct effect in the United States. See United States Fidelity & Guaranty, 199 F.3d at 98-99.

6. Each of the parties has stipulated that this Court has personal jurisdiction over that party. (JS ¶ 204.)

Choice of Law

7. In these cases, jurisdiction is founded on the FSIA. In such cases, federal courts apply the choice of law rules of the forum state, here New York, to determine what substantive law is applicable. Barkanic v. Gen. Admin. of Civil Aviation of the People's Republic of China, 923 F.2d 957, 959-60 (2d Cir. 1991); see also Brink's Ltd. v. South African Airways, 93 F.3d 1022, 1030 (2d Cir. 1996). The rule would be the same if subject matter jurisdiction were based on diversity. Schwimmer v. Allstate Ins. Co., 176 F.3d 648, 650 (2d Cir. 1999). Most of the claims in these cases are contract based claims which seek to determine the obligations among the parties pursuant to the performance bonds, as affected by the obligations of the parties under the construction contracts and any common law or contract obligations for indemnity. In Brink's, the Court of Appeals for the Second Circuit explained the approach used by New York courts in contract cases:

In contract cases, New York courts now apply a "center of gravity" or "grouping of contacts" approach. Under this approach, courts may consider a spectrum of significant contacts, including the place of contracting, the places of negotiation and performance, the location of the subject matter, and the domicile or place of business of the contracting parties. New York courts may also consider public policy where the policies underlying conflicting laws in a contract dispute are readily identifiable and reflect strong governmental interests. The traditional choice of law factors, the places of contracting and performance, are given the heaviest weight in this analysis.

Brink's 93 F.3d at 1030-31 (punctuation and citations omitted); see also Schwimmer, 176 F.3d at 650; Lazard Frères & Co. v. Protective Life Ins. Co., 108 F.3d 1531, 1539-40 (2d Cir. 1997); United States Fidelity & Guaranty, 2001 WL 300735 at *21.

8. The parties do not appear to dispute that any question with respect to the validity, enforceability and interpretation of the P-19 and the P-31 Bonds should be governed by New York law. (Sureties' Proposed Conclusions of Law ¶ 13(d); Petrobras Defendants' Proposed Conclusions of Law ¶ 6.) This is plainly correct. The most significant contacts of the parties in connection with the Bonds were in New York. Both of the performance bonds, and the MAC Payment Bond, were expressed in United States dollars and were issued in the United States. (S-72A; S-123; S-7002; JS ¶ 215.) AHAC, a Co-Surety on all three bonds, is based in New York, and Marsh & McLennan, a New York firm, is the broker listed on the P-31 Bond, which was issued in New York. (S-72A; S-123; JS ¶ 193.) Meetings pertaining to both performance bonds occurred at Marsh & McLennan's offices in New York. (PB-383; PB-410; Tr. at 4421-22.) The loan agreements underlying both the P-19 and P-31 Contracts provided that the laws of the State of New York would govern any disputes concerning them. (JS ¶ 209.) In addition, the P-31 Bond contained a forum selection clause that provided for jurisdiction and venue in the Southern District of New York. (S-123 at 3.)

9. At the hearing on foreign law, the Sureties argued that the performance bonds were invalid under Brazilian law because pursuant to Article 56 of Law 8.666, as revised, any performance bond is limited to 5% of the value of the contract (in the case of large construction contracts and service and supply contracts involving high complexity and financial risk, demonstrated by a technical opinion, the limit is increased to 10% of the value of the contract.) One of the Sureties' experts therefore opined that any bond amount in excess of that value would be unlawful under Brazilian law. (Opinion of Americo Masset Lacombe at 14-15.) However, this interpretation of Brazilian law is incorrect. Under ¶ 5 of Article 56, in cases of contracts involving the delivery of goods for which the contractor shall be the custodian, the value of the goods shall be added to the value of the guarantee. Hence, given the huge construction contracts with vessels and equipment for which the contractors were only the custodians, the value of the P-19 and P-31 could be added to the amount of the performance bonds associated with those projects. This was the reasonable interpretation of the expert for the Petrobras defendants, Paulo Cezar Aragao. (Tr. at 4769-71.) Indeed, the Sureties' argument strains credulity. It would be remarkable if, five years into this litigation with sophisticated clients and lawyers, the Sureties discovered for the first time at the conclusion of the trial that the bonds at issue were in fact illegal for a reason never previously raised. Moreover, Brasoil's calls for bids on the P-19 and P-31 Contracts clearly specified that performance bonds would be required and the contracts incorporated the bonds. (PB-279 at 69, 227-28, 745-52; PB-820 at 61, 517, 1499-1509.) The respective Consortia agreed to the P-19 and P-31 Contracts and contracted for the performance bonds. They waived any alleged illegality in the amounts of the bonds. (See Tr. at 4771.)

10. While New York law applies generally to the interpretation of the performance bonds, there may be embedded issues of Brazilian law relating to the construction contracts themselves that must be decided in determining liability under the bonds. See United States v. Funds Held in the Name or For the Benefit of Wetterer, 210 F.3d 96, 106 (2d Cir. 2000); see also Hutner v. Greene, 734 F.2d 896, 901 (2d Cir. 1984). The P-19 and P-31 Contracts are expressly governed by Brazilian law. (PB-279 at 228 § 16.2; PB-820 at 382-83.) The parties do not appear to dispute that specific questions relating to the interpretation of the P-19 and P-31 Contracts should be governed by Brazilian law. (Sureties' Proposed Conclusions of Law ¶ 13(i); Petrobras Defendants' Proposed Conclusions of Law ¶ 2.) In any event, New York would honor the contracts' choice of law clause. See Int'l Minerals & Res. v. Pappas, 96 F.3d 586, 592 (2d Cir. 1996); Katz v. Berisford Int'l PLC, No. 96 Civ. 8695, 2000 WL 959721, at *8 (S.D.N.Y. Jul. 10, 2000); Bank Itec N.V. v. J. Henry Schroder Bank & Trust Co., 612 F. Supp. 134, 140-41 (S.D.N.Y. 1985); Freedman v. Chem. Const. Corp., 43 N.Y.2d 260, 401 N.Y.S.2d 176, 372 N.E.2d 12, 15 n.* (1977); 19A N.Y. Jur.2d § 33 (1999).

11. Each of the three indemnity agreements on which the Sureties rely provides for the application of New York law, and expresses the limits of indemnity in United States dollars. United States Fidelity & Guaranty, 2001 WL 300735 at *6. The agreements envision payments in the United States in United States dollars and required the indemnitors, if their principal place of business was not in the United States, to obtain all necessary approvals to transfer money in an amount equal to the penal sum of each bond to the Sureties in the United States. (JS ¶ 214.) The obligations under the indemnity agreements should be interpreted under New York law because New York is the jurisdiction with the most significant contacts with those agreements.

12. The Sureties argue that theories of partnership, alter ego, instrumentality and/or domination make Petrobras liable for the obligations of IVI, Sade Vigesa and IESA under the indemnity agreements. Under New York choice of law principles, the law of the jurisdiction of incorporation "determines when the corporate form will be disregarded and liability will be imposed on shareholders." Fletcher v. Atex, Inc., 68 F.3d 1451, 1456 (2d Cir. 1995) (applying law of state of incorporation to alter ego theory of liability); United Feature Syndicate, Inc. v. Miller Features Syndicate, Inc., 216 F. Supp.2d 198, ____, 2002 WL 389155, at *13 (S.D.N.Y. 2002). Since IVI, Sade Vigesa, and IESA are Brazilian corporations (JS ¶¶ 73-76, 95), Brazilian law should be applied to the Sureties' attempts to hold Petrobras liable for those corporations' obligations under the indemnity agreements.

13. The parties agree that New York law should be applied to the Sureties' claim against Petrobras for tortious interference with the MAC contracts. United States Fidelity & Guaranty, 2001 WL 300735 at *23.

14. While it is useful to set out the choice of law analysis at the outset, the findings of fact already set forth show that there are few true conflicts of law in this case because the application of New York or Brazilian law would not lead to contrary results.

The Sureties' Liability under the Performance Bonds

15. The New York approach to contract interpretation, which applies to the performance bonds, is to give effect to the intent of the parties as expressed in the clear language of the contract. Paine-Webber Inc. v. Bybyk, 81 F.3d 1193, 1199 (2d Cir. 1996); Mountbatten Surety Co., Inc. v. Kips Bay Cinemas, Inc., No. 00 Civ. 430, 2000 WL 1752916, at *3 (S.D.N.Y. Nov. 29, 2000) ("Surety bonds are a species of contracts and, as a general matter, they are governed by the canons of contract law."); see also McCarthy v. American Int'l Group, Inc., 283 F.3d 121, 124 (2d Cir. 2002); Newmont Mines Ltd. v. Hanover Ins. Co., 784 F.2d 127, 135 (2d Cir. 1986). Words and phrases are given their plain meaning, and ambiguous language is construed against the party that drafted it. PaineWebber, 81 F.3d at 1199; see also McCarthy, 283 F.3d at 124. Moreover, "[u]nder New York law, it is well established that a compensated, corporate surety is not a favorite of the law and its contract of suretyship will be construed in a manner most favorable to a claimant." Cam-Ful Indus., Inc. v. Fidelity and Deposit Co. of Maryland, 922 F.2d 156, 163 (2d Cir. 1991) (quoting Timberline Elec. Supply Corp. v. Ins. Co. of North America, 72 A.D.2d 905, 421 N.Y.S.2d 987, 988 (N.Y.App.Div. 1979), aff'd, 52 N.Y.2d 793, 436 N.Y.S.2d 707, 417 N.E.2d 1248 (1980)) (punctuation omitted); see also Int'l Fidelity Ins. Co. v. County of Rockland, 98 F. Supp.2d 400, 405-06 (S.D.N.Y. 2000); Dupack v. Nationwide Leisure Corp., 73 A.D.2d 903, 424

N.Y.S.2d 436, 439 (N.Y.App.Div. 1980) ("LA] surety bond, if unambiguous, should be given its plain, ordinary and proper meaning; any ambiguity is to be resolved in favor of those to be protected.")

16. Paragraph 3 of the P-19 and P-31 Bonds contained conditions precedent to the Sureties' obligations under the Bonds. "A condition precedent is an act or event, other than a lapse of time, which, unless the condition is excused, must occur before a duty to perform a promise in the agreement arises." Oppenheimer & Co. v. Oppenheim, Appel, Dixon & Co., 86 N.Y.2d 685, 636 N.Y.S.2d 734, 660 N.E.2d 115 (1995) (citation omitted). Paragraph 3 of each Bond states clearly that "the Suret[ies"] obligation under this Bond shall arise after" Brasoil has carried out the actions specified in ¶¶ 3.1-3.3 of the Bond. S-72A; S-123 (emphasis added).) Those actions plainly constitute conditions precedent. Accord L & A Contracting Co. v. Southern Concrete Svcs., Inc., 17 F.3d 106, 110-11 (5th Cir. 1994) (clear declaration of default is precondition to surety's liability under bond); Balfour Beatty Constr., Inc. v. Colonial Ornamental Iron Works, 986 F. Supp. 82, 86 (D.Conn. 1997) ("Performance bond requirements for notice of default and demand that the surety step in and perform under the bond must be met before an obligee can recover damages under the performance bond."); Bank of Brewton, Inc. v. Int'l Fidelity Ins. Co., Nos. 1000387 & 1000855, 2002 WL 227934, at *5-*7 (Ala. Feb. 15, 2002) (plain language of AIA 312 form establishes that owner must comply with ¶ 3 in order to trigger surety's obligations); cf. Int'l Fidelity, 98 F. Supp.2d at 432-37 (paragraph 3 of AIA 312 form did not establish conditions precedent to surety's liability for indemnification where construction contract contained separate indemnification provision).

17. There is no question that Brasoil called the appropriate meetings in accordance with Paragraph 3.1 of the Bonds to give the Consortia and the Sureties notice that it was considering declaring a "Contractor Default." (PB-352; PB-358; PB-359; PB-360; PB-454; PB-479; PB-480; Tr. at 1195-96, 1199-1200, 1208-09, 1314-15, 1332-33, 3561-64.)

18. Brasoil also complied with Paragraph 3.2 of the Performance Bonds. As explained above, in the case of both the P-19 and the P-31 Contracts, Brasoil notified the respective Consortium that Brasoil was declaring a "Contractor Default" and that Brasoil was terminating "the Contractor's right to complete the Contract." (PB-318; S-646.) At the same time, Brasoil notified the Sureties of the Contractor Default and the termination of the Contractor's right to complete the contract. (S-582; S-646.) This is not a case like L & A Contracting, where the correspondence did not make it sufficiently clear that a default had been declared. 17 F.3d at 109-11. In L & A Contracting, the word "default" was not even used. Id. at 111. In this case, there could be no doubt that Brasoil was declaring a default, and Brasoil explicitly stated as much. (PB-318; S-646.)

19. In its notices, Brasoil did contend that the Consortia had continuing obligations under the P-19 and P-31 Contracts. Notwithstanding those claims, a default was declared, and the right to complete the contracts was terminated, in the plainest terms. Indeed, the Sureties' own counsel acknowledged, with respect to the termination of the P-19 Contract, that "The Contractor regards Petrobras' May 12th termination to be as Petrobras has stated: a termination of the P-19 Contract pursuant to [§ 8 of the General Contractual Conditions]. The Sureties are proceeding on the same premise." (PB-561 at 2.) While there was, to be sure, self-serving correspondence from the Consortia denying that there had been any Contractor default and expressing doubt as to what Brasoil had done in its notices (see, e.g., S-602), this correspondence does not undermine the effect of the clear notices of Contractor Default and the termination of the Consortia's rights to complete the contracts.

20. The Sureties argue that there had been no Contractor Default under the P-19 and P-31 Contracts and therefore the notices of default were invalid. The interpretation of the construction contracts and the issue of whether there was a default under those contracts is governed by Brazilian law.

21. Under either New York or Brazilian law, there were Contractor Defaults under the terms of the P-19 and P-31 Contracts. Among the events of default specified in both contracts and Law 8.666 was non-compliance with contract clauses, specifications, designs or deadlines. (PB-279 at 268 § 8.1.1; PB-820 at 511 § 12.1.1; Law 8.666, Art. 78(1).) A fundamental obligation of the Consortia was to deliver the completed platforms for the agreed prices. As explained above, the adjusted contract amounts for both the P-19 and P-31 Contracts had been exhausted before Brasoil declared defaults on the contracts. Indeed, in letter agreements dated April 23, May 6, and May 9, 1997, the Consortia recognized that the contract amounts were exhausted and that more money was needed for completion. (S-1526A at 1, 5, 9.) Because the contract amounts were exhausted but more money was needed for completion, the Consortia had "failed to comply with contract clauses," and therefore was in default. (See Aragao Decl. at 48-49.)

22. The correspondence among the parties at the time does not support the Sureties' current contention that the exhaustion of the contract balances and a state of non-completion of the projects did not constitute an event of default. The Consortia and the Sureties argued at the time that the Consortia were owed more money under the contracts for the additional work they had done, or that the Consortia's right to complete the contracts had not been terminated. (See, e.g., S-602 at 4-5; S-657.) The Consortia and the Sureties did not argue that if the Consortia had been paid all that they were owed, and still had not completed the platforms, that would not be an event of default under the contracts.

23. For the reasons explained in the Findings of Fact, each Consortium had been paid all of the amounts that were due to it under the relevant contract and amendments at the time that it was declared in default. Even taking into account additional change orders that were properly owed, the Consortia had still been paid all that was owed to them.

24. During the Sureties' summation, their counsel raised the new argument that if the contract balances were in fact paid, then the Contracts automatically terminated under the Contracts and Law 8.666, and therefore there could have been no default. The fact that this argument was raised for the first time five years after the notices of default, and after months of trial, indicates its lack of merit.

25. Pursuant to § 5.1 of the P-19 Contract (PB-279 at 218-19) and § 5.4 of the P-31 Contract (PB-820 at 504), when the total sum of the payments made by Brasoil to the Contractor under one of the contracts reaches the total amount established in the contract price that contract "shall be deemed automatically terminated." These provisions are contained in the price provisions of the contracts, not in the termination sections. They simply indicate that Brasoil has no further obligation to pay any further funds when it has paid the complete contract price. Mr. Aragao, an expert on Brazilian law, testified credibly that these provisions are not default provisions. (Tr. at 4817-18.) Even if these provisions were considered to be termination or default provisions, there is nothing in the contracts or in Brazilian law that would indicate that these are "no-fault" termination provisions, such that there is no further liability by the contractors. (Id. at 4818-20.) The Sureties' contrary position would result in unreasonable results. It would mean that a contractor, despite its obligations once it was paid the full price of the contract. The parties to the P-19 and P-31 Contracts never read the provisions that way and even the lawyers did not advance such an argument until the summations. The Sureties' argument is contrary to the reasonable interpretation of the construction contracts and the plain intent of the parties.

26. Brasoil also complied with ¶ 3.3 of the P-19 and P-31 Bonds. In both cases, Brasoil determined, correctly, that it had paid the Contract Balance and that there was no further Contract Balance to be paid. Therefore, although Brasoil was prepared to pay the Contract Balance as defined in the Bonds, no payment was necessary.

27. A further condition in ¶ 3 of the Bonds is that there be no Owner Default-that is, no default by Brasoil. The Sureties argue that there was an Owner Default because Brasoil had failed to pay the

mounts that were owed under the Contracts. However, Brasoil had in fact paid in excess of the amounts owed under the original contracts together with the contract amendments. The Sureties further argue that Brasoil was in default because the Consortia were owed additional funds for additional work. As explained in detail in the Findings of Fact, most of the changes to the value of the contracts resulting from additional work were reflected in the negotiated contract amendments, which were in fact paid; and taking the proper value of all changes into account, Brasoil had paid more than it was required to pay by the time it declared the defaults. Brasoil was not in default, notwithstanding the proliferation of alleged change orders that were submitted after difficulties arose with the completion of the contracts and lawyers became involved.

28. The Petrobras Defendants did not, as the Sureties argue, unreasonably fail to cooperate in the Sureties' investigation pursuant to the Bonds. It is clear that the purported investigation of the Sureties was not a reasonable effort to determine whether the Sureties would perform the contracts or pay damages or refuse to pay. Rather, the Sureties had determined not to pay. Their investigation was a thinly veiled effort to prepare for litigation and to develop defenses to any payment obligations. On multiple occasions before the declaration of default, the Petrobras Defendants had forthrightly provided the Sureties with information about the projects and their problems. (See, e.g., PB-78; S-291.)

29. The Sureties argue that Brasoil was in default under the April 23 Letter Agreement (S-1526A at 1-2) and other alleged agreements which created a "new agreement" that obligated Brasoil to pay for the completion costs of the projects. On their face, however, these letter agreements disclaimed that they were novations, and would not replace the obligations of the parties under the Contracts pursuant to either Brazilian law (Aragao Decl. at 51-53), under which the Contracts should properly be construed, or New York law, see In re Balfour MacLaine Int'l Ltd., 85 F.3d 68, 82-83 (2d Cir. 1996) (outlining New York law requirements for novation, including extinguishment of old agreement); Wang v. Chen, No 89 Civ. 8319, 1992 WL 7840, at *6 (S.D.N.Y. Jan. 10, 1992) (New York's novation requirements are "stringent" and intent to effect a novation must be clearly shown) (citing Trans-Orient Marine Corp. v. Star Trading & Marine, Inc., 736 F. Supp. 1281, 1283 (S.D.N.Y. 1990), aff'd, 925 F.2d 566 (2d Cir. 1991)); Healey v. Healey, 190 A.D.2d 965, 594 N.Y.S.2d 90, 91 (N.Y.App.Div. 1993) (rejecting novation claim where there was no manifestation of "a clear and definite intent to effect a novation" (punctuation omitted)); 22A N.Y. Jur.2d § 468 ("Where an assumption agreement expressly provides that the obligation survives., a novation will not be found....").

30. The Sureties argue that the Petrobras Defendants altered the provisions of the P-19 and P-31 Contracts to such an extent that the Sureties were discharged from their obligations under the performance bonds. Specifically, the Sureties allege that the Petrobras Defendants effectively

substituted themselves for the principals named in the Bonds — the Consortia — by dominating and controlling the Consortia; converted the P-19 and P-31 Contracts from lump sum to cost plus contracts; changed the scope of work beyond the amount authorized by the contracts; and disregarded and/or modified the payment schedules set forth in the contracts.

31. As a general rule, "the obligation of a surety or guarantor of due performance of a contract cannot be extended, without the surety's consent, to cover performance of a different contract." Becker v. Faber, 280 N.Y. 146, 19 N.E.2d 997, 998 (1939); see also Bier Pension Plan Trust v. Estate of Schneierson, 74 N.Y.2d 312, 546 N.Y.S.2d 824, 545 N.E.2d 1212, 1214 (1989); In re Liquidation of Union Indemnity Ins. Co. (Corcoran), 234 A.D.2d 120, 651 N.Y.S.2d 436, 437 (N.Y.App.Div. 1996). Thus, it is sometimes said that a surety's obligation is strictissimi juris. See Compagnie Financiere de CIC et de L'Union Europeenne v. Merrill Lynch, Pierce, Fenner & Smith Inc., 188 F.3d 31, 34 (2d Cir. 1999); Page v. Krekey, 137 N.Y. 307, 33 N.E. 311, 314 (1893); Mangold v. Keip, 177 Misc.2d 953, 679 N.Y.S.2d 240, 241 (1998). However, "[t]he rule of strictissimi juris is not rigidly to be applied in the case of a compensated surety on a construction contract." Hunt v. Bankers & Shippers Ins. Co. of New York, 60 A.D.2d 781, 400 N.Y.S.2d 645, 647 (N.Y.App.Div. 1977); see also Cam-Ful, 922 F.2d at 163; Big Red Boat (Two) Ltd. v. Greenwich Ins. Co., No. 00 Civ. 7672, 2002 WL 1163557, at *3 (S.D.N.Y. May 31, 2002); Mount batten Surety Co., Inc. v. Kips Bay Cinemas, Inc., No. 00 Civ. 430, 2000 WL 1752916, at *8 (S.D.N.Y. Nov. 29, 2000); Int'l Fidelity, 98 F. Supp.2d at 406 (citing McKegney v. Illinois Surety Co., 170 A.D. 261, 155 N.Y.S. 1041 (N.Y.App. Div. 1915)); In re Liquidation of Union Indemnity Ins. Co. (Solco Plumbing Supply, Inc.), 199 A.D.2d 209, 605 N.Y.S.2d 756, 758 (N.Y.App.Div. 1993); 63 N.Y. Jur.2d § 522; accord Chapman v. Hoage, 296 U.S. 526, 531, 56 S.Ct. 333, 80 L.Ed. 370 (1936); Winston Corp. v. Continental Casualty Co., 508 F.2d 1298, 1302-04 (6th Cir. 1975); Restatement (Third) of Suretyship & Guaranty, § 41.

32. In evaluating a compensated surety's claim that an alteration of the underlying contract relieves the surety of its obligation under its bond, a court must bear in mind that "the rule of strict construction is liable at times to work a practical injustice, and it ought not to be extended beyond the reason for the rule." BIG RED BOAT, 2002 WL 1163557 at *3 (punctuation omitted) (quoting St. John's College v. Aetna Indemnity Co., 94 N.E. at 996) (citing United States Fidelity & Guaranty Co. v. United States, 191 U.S. 416, 426, 24 S.Ct. 142, 48 L.Ed. 242 (1903)); see also Buffalo Slag Co. v. H & D Constr. Co., 94 Misc.2d 212, 404 N.Y.S.2d 292, 294 (1974). Thus, courts have required, variously, that in order to discharge a compensated surety from its bond, a contract alteration must increase the surety's risk, BIG RED BOAT, 2002 WL 1163557 at *3-*4; be "material," Am-Haul Carting v. Contractors Cas. & Surety Co., 33 F. Supp.2d 235, 243 (S.D.N.Y. 1998); St. John's, 94 N.E. at 996, or "substantial," Wing & Bostwick Co. v. United States Fidelity & Guaranty Co., 150 F. 672, 676 (C.C.W.D.N.Y. 1906); Midland Steel Warehouse Corp. v. Godinger Silver Art Ltd., 276 A.D.2d 341, 714 N.Y.S.2d 466, 468 (N.Y.App.Div. 2000); or be prejudicial to the surety, Aetna Casualty and Surety Co. v. LFO Constr. Corp., 207 A.D.2d 274, 615 N.Y.S.2d 389, 391 (N.Y.App.Div. 1994). See also 63 N.Y. Jur.2d § 194; Restatement (Third) of Suretyship & Guaranty, § 41 (surety remains liable after modification of underlying contract unless modification

creates a substituted contract or imposes fundamentally different risks on the surety; however, surety is discharged from any duty under the bond to the extent that modification would otherwise cause surety a loss).

33. In this case, several of the changes to the P-19 and P-31 Contracts alleged by the Sureties simply did not occur. As explained at length in the Findings of Fact the Petrobras Defendants never dominated or controlled the Consortia or any of their members. Therefore, there was no substitution of principals under the Contract. It is also clear, as explained in the Findings of Fact, that the Contracts were never converted to cost plus contracts.

34. While there were changes in the scope of the P-19 and P-31 Projects, those changes did not release the Sureties from their obligations under the Bonds. "Under construction contracts specifically making allowances for alterations during the progress of the work, [only] changes not fairly within the contemplation of the parties at the time the original contract was made, constituting a material departure from the original undertaking, will . . . release a nonconsenting surety from obligations under its bond." Corcoran, 651 N.Y.S.2d at 437 (N.Y.App.Div. 1996). The P-19 Contract provides for changes in the project's scope, up to a total of 25% of the contract price. (PB-279 at 224.) The P-31 Contract also provides for changes in scope, although it does not specify a numerical limit (PB-820 at 509); the Sureties suggest that 25% of the contract price would be a reasonable limit on change orders under the P-31 Contract. (See Sureties' Conclusions of Law \P 22(z).) The Court has already found that the changes on the P-19 and P-31 Projects had a total value of approximately 5.5% and 13% of their respective contract prices, well within the amounts contemplated by the contracts. The changes in the scope of the P-19 and P-31 Projects were in accordance with the contracts, were fairly within the contemplation of the parties when the contracts were made, and do not constitute a material departure from the original undertakings. Indeed, because the changes in scope were specifically provided for in the contracts, they do not constitute changes to the contracts.

35. The Petrobras Defendants made payments on the P-19 and P-31 Projects outside the schedules set forth in the respective Contracts. The P-19 and P-31 Contracts do not provide for adjustments to the payment schedule.

36. Some of the payments outside of the original schedule were made pursuant to contract amendments that changed the contract schedule itself. Amendment Two to the P-19 Contract and Amendment Three to the P-31 Contract formalized the negotiated change orders that were foreseen in the contracts and therefore do not constitute changes to the contracts.

37. Amendment One to the P-19 Contract and Amendments One and Two to the P-31 Contract accelerated a portion of the progress payments on the contracts in order to compensate for the Consortia's financial difficulties and to allow the contracts to continue to be performed. These amendments did not prejudice the Sureties or increase their risk. The amendments did not reduce the Consortia's incentive to work on or to complete the jobs. By allowing the Consortia to continue construction, the amendments postponed the date of the Contractor Default and relieved the Sureties of performance obligations that they otherwise would have had. Nor could the amendments be considered "significant" or "material" in the context of the contracts as a whole. The total amount due under the contracts and the technical requirements of the contracts remained exactly the same. Moreover, the Sureties did not review the construction contracts before issuing the Bonds, and there is no other evidence that they considered the payment schedules before issuing the bonds. The strictissimi juris rule seeks to safeguard the general contractual principle that a party's assent to a given obligation should not be expanded to cover another obligation to which it has not agreed. See Becker 19 N.E.2d at 998-99. The Sureties, having collected approximately \$7.5 million in premiums for the P-19 and P-31 Bonds (JS ¶ 15; PB-834), attempt to avoid their obligations under those Bonds based on modifications to provisions of the underlying contracts with which they never bothered to acquaint themselves in the first place, despite the fact that the modifications improved, rather than prejudiced, the Sureties' position. Here, a rigid application of the strictissimi juris rule in favor of the compensated sureties would go beyond the reason for the rule, and is not permitted under New York law.

38. The other payments that the Petrobras Defendants made outside of the contracts were made in the form of advances and direct payments. An obligee's act of leniency towards a principal does not suffice to release a surety from its obligations if the principal remains obligated under its original agreement. United States v. Bowman Poultry Farms, Inc., No. 92-CV-805. 1994 WL 577524, at *5 W.D.N.Y. Sept. 30, 1994); Bier Pension Plan, 546 N.Y.S.2d at 827, 545 N.E.2d 1212; Becker, 19 N.E.2d at 998. These payments did not change the parties' obligations under the contracts; indeed, the series of letter agreements beginning on April 23, 1997 contained specific assurances that they did not constitute novations of the contracts or the performance bonds. (S-1526A.) As explained elsewhere in these Conclusions of Law, there was no novation under Brazilian or New York law. The Consortia were still required to perform according to the contract schedules. Therefore, these payments were acts of leniency, not alterations of the P-19 or 31 Contracts. See Argonaut Ins. Co. v. Town of Cloverdale, 699 F.2d 417, 419 (7th Cir. 1983) (discussing distinction between advance payments and contract modifications).

39. Actions on the part of an obligee that do not amount to alterations of the underlying agreement may yet release the surety from its obligations if they cause prejudice to the surety. Smith v. Molleson, 148 N.Y. 241, 42 N.E. 669, 670 (1896); 117-14 Union Turnpike Assocs., L.P. v. County Dollar Corp., 187 A.D.2d 357, 589 N.Y.S.2d 880, 880 (N.Y.App.Div. 1992). This arrangement did not cause any prejudice to the Sureties. As with the contract amendments, the incentive of each Consortium to perform was not diminished, and their defaults were postponed. Brasoil completed the projects in a reasonable manner and mitigated its damages by continuing to use the P-19 Consortium. Furthermore, Brasoil did nothing to diminish the Sureties' ability to arrange for completion, their ability to take any other measures under ¶ 4 of the Bonds once the defaults were declared, or their status as sureties and/or subrogees under the Bonds and other instruments. Therefore, the advances and direct payments do not release the Sureties from their obligations under the Bonds. See St. John's, 94 N.E. at 996 (temporary loan provided to construction contractor was a voluntary payment which did not release the surety from its obligation); see also North American Specialty Ins. Co. v. Chichester School Dist., No. Civ.A. 99-2394, 2000 WL 1052055, at *12 & n. 15 (E.D. Pa. Jul 20, 2000) (collecting cases) (modern rule applicable to compensated sureties is that premature or unauthorized payments to a contractor discharge the surety "to the extent that such unauthorized payments result in prejudice or injury" (punctuation and citations omitted)).*fn4

40. In any event, the Sureties consented to the alleged changes relating to payments outside the schedule set forth in the original contracts. "[A] surety may consent in advance, in the contract of guarantee, to modification of the underlying contract." Banco Portugues do Atlantico v. Asland, 745 F. Supp. 962, 968 (S.D.N.Y. 1990); see also Compagnie Financiere de CIC, 188 F.3d at 34-35. Such advance consent need not specifically provide that the bond will survive modifications; rather, the question is "whether the scope of the consent given is sufficiently broad to encompass the change at issue." Banco Portugues, 745 F. Supp. at 970. In Banque Worms v. Andre Café Ltd., 183 A.D.2d 494, 583 N.Y.S.2d 438, 439 (N.Y.App.Div. 1992), for example, the Appellate Division, First Department held that because a guarantor had executed a short form power of attorney in favor of the president of the principal, an extension of time granted to that principal did not release him from his obligation under the guaranty. In White Rose Food v. Saleh, 292 A.D.2d 377, 738 N.Y.S.2d 683, 684 (N.Y.App.Div. 2002), the Appellate Division, Second Department refused to release the guarantor of a promissory note from his obligation because the guarantor had consented in advance to the claimed modification in the promissory note. The guarantee in that case provided that "the undersigned as Guarantors hereby waive notice of any demand for payment . . . and all other notices to which the undersigned Guarantors might be entitled. . . ." Id. (Crane, J., dissenting in part) (first ellipsis in original); see also Am-Haul, 33 F. Supp.2d at 244 (noting that "the performance bond specifically waives notice to the surety of any alteration by its owner and concluding that the surety was not discharged from its obligations under the bond).

41. The terms of the P-19 and P-31 Bonds make it clear that the Sureties contemplated the possibility of, and consented in advance to, changes in timing when they guaranteed the projects. Paragraph 8 of each Bond provides: "The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations." (S-72A; S-123.) The understanding of the parties with respect to the proper interpretation of the Bonds is reflected by the fact that when the Sureties were notified, beginning in April, 1996 (PB-78), of the changes in contractual payment schedules and the use of advance payments, the Sureties did not indicate that the advance payments somehow discharged them from their obligations under the Bonds. The Sureties continued to fail to protest the advance payments through at least December, 1996. (S-314; S-1268; S-319; S-335; S-363.)

42. The Sureties are not entitled to a declaration that they are not liable under the P-19 and P-31 Bonds.

43. Indeed, the Sureties are liable to Brasoil in the amount of damages found by the Court, together with pre-judgment interest and attorneys' fees as provided in the Bonds. Brasoil is the Owner indicated on the face of the P-19 and P-31 Bonds. (S-72A; S-123.) As discussed above, Brasoil properly declared contractor defaults, and terminated the Consortia's right to complete the projects as required by ¶ 3 of the Bonds. Brasoil was not in default when it took those actions. In addition, there were no remaining Contract Balances when the defaults were declared, and Brasoil was therefore not required to pay any funds to the Sureties. Pursuant to ¶ 3 of the Bonds, the Sureties' obligation under the Bonds arose after Brasoil declared the defaults and terminated the Consortia's right to complete the projects. Thereafter, the Sureties did not elect to arrange for completion by the Consortia, undertake to perform or complete the construction contracts themselves, or arrange for performance by a replacement contractor.

Damages

44. The Court has already found that the total amount of damages that Brasoil is entitled to recover for the Sureties breach of their obligations under the P-19 Bond is \$90,600,000, plus attorneys' fees (total not to exceed the Bond's limit of \$110,532,660.) The Court has also found that the total amount of damages that Brasoil is entitled to recover for the Sureties' breach of their obligations under the P-31 Bond is \$146,201,776, plus attorneys' fees (total not to exceed the Bond's limit of \$163,000,021.)

45. Included in the amounts of damages are the delay damages provided in the P-19 and P-31 Contracts. Pursuant to ¶ 6.3 of each Bond, an element of damages is "[I]iquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor." The Sureties argue that the Court should look to Brazilian law to determine if there is a valid liquidated damages provision in the contracts. The Sureties then argue that the delay damages provisions of the contracts would be construed under Brazilian law to be "multas moratorias," or penalties, and would be limited to 10% of the value of the debt under the Brazilian Usury Law. (See Sureties' Proposed Conclusions of Law ¶ 55(b).)

46. The Sureties' argument fails. First, the issue of the meaning and legality of the liquidated damages clause of the P-19 and P-31 Bonds should be interpreted under New York law. The Sureties have correctly argued that interpretation of the Bonds should generally be governed by New York law. The meaning of ¶ 6.3 should likewise be governed by New York law because the question in interpreting the Bonds is what the parties to the Bonds intended by providing for recovery of liquidated damages. Under New York law, a liquidated damages provision will be enforced where it is a reasonable estimate of damages which are difficult to ascertain. BDO Seidman v. Hirshberg, 93 N.Y.2d 882, 690 N.Y.S.2d 854, 712 N.E.2d 1220, 1227 (1999); Leasing Svc. Corp. v. Justice, 673 F.2d 70, 73 (2d Cir. 1982). Given the substantial amounts of lost oil and gas production at stake and the uncertainty of the precise value of those losses, it was reasonable for the parties to provide for daily delay damages of 0.1% of the prices of the contracts, to a maximum of 20%. See Truck Rent-A-Center Inc. v. Puritan Farms 2nd, Inc., 41 N.Y.2d 420, 393 N.Y.S.2d 365, 361 N.E.2d 1015, 1019-20 (1977).

47. Second, even if the meaning of the Bonds' liquidated damages provisions turned on the interpretation of the contractual delay damages provisions under Brazilian law, the provisions would still be valid. As Mr. Aragao indicated after surveying Brazilian law: "the subject clauses in the P-19 and P-31 contracts are equivalent to liquidated damages for delay [in American law] and are valid and enforceable." (Aragao Decl. at 89; see also Tr. at 4781.) Moreover, the great weight of reasoned authority in Brazil is that the usury law from which the Sureties derive their alleged 10% limitation on liquidated damages such as the liquidated damages clauses in the P-19 and P-31 Contracts, but is instead limited to loan agreements. (Tr. at 4782-83; Aragao Decl. at 87.)

48. The Sureties are liable for the legal fees of this action, as provided for in the Bonds. (S-72A \P 6.2; S-123 \P 6.2.)

49. The Sureties are liable for pre-judgment interest on Brasoil's claim. Under New York choice of law rules, the law of the jurisdiction that determines liability also governs the award of pre-judgment

interest on that particular liability. Entron, Inc. v. Affiliated FM Ins. Co., 749 F.2d 127, 131 (2d Cir. 1984). The Sureties liability has been determined based on the breach of the performance bonds, which are governed by New York law. Thus, New York law governs the award of prejudgment interest on this claim. Under N.Y. Gen. Oblig. Law § 7-301, "the amount recoverable from a surety shall not exceed the amount specified in the undertaking except that interest in addition to this amount shall be awarded from the time of default by the surety." The prejudgment interest provided for in § 7-301 "is intended to return the parties to the financial situation they would have been in had the surety paid the obligation when due." Town of Clarkstown v. The North River Ins. Co., 803 F. Supp. 827, 830 (S.D.N.Y. 1992).

50. Paragraph 5 of each Bond provides that:

the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

(S-72A; S-123.)

51. With respect to the P-19 Bond, Brasoil supplied the additional written notice contemplated in ¶ 5 on June 26, 1997. (S-663.) Accordingly, the Sureties were in default on the P-19 Bond beginning on July 11, 1997, 15 days after the letter was sent, and received, by telefax.

52. There is no evidence that Brasoil sent a ¶ 5 letter in connection with the P-31 Bond before the commencement of this action. On August 18, 1997, by filing the current action, the Sureties necessarily denied liability on the performance bonds. (JS ¶ 280.) Pursuant to ¶ 5, no further notice was required from Brasoil once the action was filed. Accordingly, the Sureties were in default on the P-31 Bond beginning on August 18, 1997.

53. Therefore, the Sureties are liable for \$90,600,000 on the P-19 Bond, plus pre-judgment interest from July 11, 1997, and \$146,201,776 on the P-31 Bond, plus pre-judgment interest from August 18, 1997. In addition, the Sureties are liable for attorneys' fees on each Bond. The total award of damages, including attorneys' fees, on each Bond is limited to the amount of that Bond. (S-72A ¶ 6; S-123 ¶ 6; see N.Y. Gen. Oblig. Law § 7-301.) However, pre-judgment interest is not limited to the amount of the Bonds. N.Y. Gen. Oblig. Law § 7-301.

The Indemnification Action

54. The Sureties seek to impose liability on Petrobras for any liability the Sureties have to Brasoil. The Sureties seek to impose indemnity obligations upon Petrobras under three legal theories, all of which arise from Petrobras' alleged association with and exercise of domination and control over IVI, the P-19 and the P-31 Consortia and the Projects themselves. These theories are: (i) Petrobras became the alter ego of IVI and the Consortia and they became the instrumentality of Petrobras; (ii) Petrobras became the principal of IVI and the Consortia and they became the agent of Petrobras; and (iii) Petrobras and IVI became partners/joint venturers in the P-19 and P-31 Projects.

55. Under Brazilian law, which applies to these claims, there is no basis to hold Petrobras liable for the obligations of either Consortium or any of their members. Brazilian courts will not disregard the corporate form where there is no common ownership between the entities alleged to be in an alter ego relationship. (Aragao Decl. at 78, 80-82.) There is no evidence of common ownership as between either of the Petrobras Defendants, on the one hand, and any of the members of the Consortia, on the other hand.

56. Petrobras also did not become a partner with the Consortia under Brazilian law. (Brazilian law has no specific provision for joint ventures.) (Id. at 66.) Petrobras did not formally establish a partnership or consortium with the Consortia or any of their members pursuant to the relevant Brazilian statutes. Petrobras never actually formed a partnership with the Consortia or their members under Brazilian law; that is, they did not intend to cooperate as partners, and never agreed to submit to decisions of a partnership, contribute to a partnership to attain common goals, or associate themselves to form a separate entity. (See id. at 73 (citing Maria Helena Diniz, 1 Curso de Direito Civil Brasiliero at 173 (16th ed. 2000)).) Nor did Petrobras, on the one hand, and the Consortia or any of their members, on the other, hold themselves out as partners. Art. 305 of the Brazilian Commercial Code establishes that a "de facto partnership is presumed to exist or have existed when someone performs acts specific to a partnership and that are not normally performed without partnership standing," and sets forth particular examples of such acts:

Wanton and joint business[;] [c]ommon acquisition, sale, barter or payment[;] [w]hen one of the partners acknowledges that he/she is a partner and is not publicly contradicted by the others[;] [w]hen two or more persons propose an officer or manager in common; [d]issolution of the association as a partnership[;] [u]se of the pronoun "us" or "our" in correspondence, books, invoices, accounts and other commercial papers[;] [r]eceipt of and reply to letters addressed to the partnership[;] [u]se of a common trademark on property or packages[;] [u]se of a name plus the words "and company."

(See Aragao Decl. at 68.) No party did any of these or any other acts in such a way as to suggest the existence of a partnership between Petrobras and either of the Consortia or any of their members. Moreover, under Brazilian law Petrobras cannot be liable under an indemnity agreement that it did not sign. (Id. at 71 (citing Brazilian Civil Code, Art. 1483).)

57. The Sureties' arguments fail under New York law as well. The New York rule for claims that attempt to "pierce the corporate veil" is that "liability . . . may be predicated either upon a showing of fraud or upon complete control by the dominating corporation that leads to a wrong against third parties." Wm. Passalacqua Builders, Inc. v. Resnick Developers S., Inc., 933 F.2d 131, 138 (2d Cir. 1991). Factors that tend to show domination include

(1) the absence of the formalities and paraphernalia that are part and parcel of the corporate existence, i.e., issuance of stock, election of directors, keeping of corporate records and the like, (2) inadequate capitalization, (3) whether funds are put in and taken out of the corporation for personal rather than corporate purposes, (4) overlap in ownership, officers, directors, and personnel, (5) common office space, address and telephone numbers of corporate entities, (6) the amount of business discretion displayed by the allegedly dominated corporation, (7) whether the related corporations deal with the dominated corporation at arms length, (8) whether the corporations are treated as independent profit centers, (9) the payment or guarantee of debts of the dominated corporation by other corporations in the group, and (10) whether the corporation in question had property that was used by other of the corporations as if it were its own.

Id., 933 F.2d at 139. Neither these factors, nor any others, indicate that the corporate form of the Consortia or their members should be disregarded. The Petrobras Defendants at all times maintained an arm's length relationship with the Consortia and their members. Petrobras never took over control of the projects, shared bank accounts with the Consortia or their members, siphoned funds belonging to the Consortia or their members, acquired a controlling interest in the Consortia or their members, or used the Consortia or their members as a facade for its own operations. There is no evidence of any overlap between the boards and officers of the Consortia's member corporations and those of the Petrobras Defendants. In addition, Petrobras did not use, or attempt to use, the Consortia or any of their members as instruments in a fraudulent scheme, and there was no wrong to any third party.

58. Petrobras was not a partner or joint venturer of the Consortia or any of their members under New York law. New York authorities provide that "a joint venture is in a sense a partnership for a limited purpose, and it has long been recognized that the legal consequences of a joint venture are equivalent to those of a partnership." Itel Containers Int'l Corp. v. Atlanttrafik Express Serv. Ltd., 909 F.2d 698, 701 (2d Cir. 1990) (punctuation omitted) (citing Gramercy Equities v. Dumont, 72 N.Y.2d 560, 534 N.Y.S.2d 908, 531 N.E.2d 629, 632 (1988)). "In order to form a joint venture, (1) two or more persons must enter into a specific agreement to carry on an enterprise for profit; (2) their agreement must evidence their intent to be joint venturers; (3) each must make a contribution of property, financing, skill, knowledge, or effort; (4) each must have some degree of joint control over the venture; and (5) there must be a provision for the sharing of both profits and losses." Id. Petrobras never entered into an explicit or implicit joint venture agreement with either of the Consortia or any of their members and there was never any arrangement for the sharing of profits and losses with respect to either the construction projects or the oil and gas ultimately produced by P-19 and P-31.

59. The Consortia and/or their members did not become the agents of Petrobras. "An express agency is created by written or spoken words or other conduct of the principal which, reasonably interpreted, causes the agent to believe that the principal desires him so to act on the principal's account." Id., 909 F.2d at 702 (punctuation and citation omitted). Implied agency is created by "written or spoken words or any other conduct of the principal which, reasonably interpreted, causes [a] third person to believe that the principal which, reasonably interpreted, causes [a] third person to believe that the principal consents to have the act done on his behalf by the person purporting to act for him." Id. In this case, the P-19 and P-31 Contracts set out the relationships between the parties: Brasoil was the owner of the projects, Petrobras its representative, and the Consortia were the contractors. While there is ample evidence that Brasoil was an alter ego of Petrobras, in their communications and actions the Petrobras defendants always respected the distinction between the contractors, on the one hand,

and the owner and representative, on the other. Neither express nor implied agency provides a basis to impose liability on Petrobras under the indemnity agreements.

The Tortious Interference Claim

60. The Sureties allege that Petrobras tortiously interfered with: (i) IVI and/or Brasoil's obligations under the Assignment of Receivables, the Notice of Assignment, and the MAC Payment Bond; (ii) contracts of which the Sureties are third-party beneficiaries; and (iii) the Sureties' suretyship rights, including their subrogation rights and their rights to performance by the P-19 Consortium.

61. To maintain a cause of action for tortious interference with contract under New York law, a plaintiff must prove "the existence of a valid contract and damages caused by the defendant's knowing and intentional interference with that contract without reasonable justification," Jews for Jesus, Inc. v. Jewish Community Relations Council of New York, Inc., 968 F.2d 286, 292 (2d Cir. 1992); see also Int'l Minerals, 96 F.3d 586, 595; Kronos, Inc. v. AVX Corp., 81 N.Y.2d 90, 595 N.Y.S.2d 931, 612 N.E.2d 289, 292 (1993), as well as a "but for" causal connection between the interference and damages, Sharma v. Skaarup Ship Management Corp., 916 F.2d 820, 828 (2d Cir. 1990); Mina Investment Holdings Ltd. v. Lefkowitz, 184 F.R.D. 245, 257 (S.D.N.Y. 1999). A party acting in its economic interest may "procur[e] the breach of a contract in the exercise of equal or superior right . . . with just cause or excuse and [such action] is justification for what would otherwise be an actionable wrong," unless the party pressing the tortious interference claim can prove that the allegedly interfering party acted out of either malice on the one hand, or fraudulent or illegal means on the other. Foster v. Churchill, 87 N.Y.2d 744, 642 N.Y.S.2d 583, 665 N.E.2d 153, 157 (1996) citing Felsen v. Sol Café Mfg. Corp., 24 N.Y.2d 682, 301 N.Y.S.2d 610, 249 N.E.2d 459, 461 (1969)).

62. Petrobras did not tortiously interfere with any valid contract involving MAC, including the Assignment of Receivables, the Notice of Assignment, and the MAC Payment Bond.

63. As the Court concluded on the motion for judgment on the pleadings, Petrobras was privileged as the ultimate parent and agent of Brasoil in connection with the P-19 Project to advise Brasoil not to make payments to MAC. United States Fidelity & Guaranty, 2001 WL 300735 at *23. Petrobras also had the right not to make any further payments to IVI or to MAC in or after April, 1997 because, as the State court found, MAC, slip op. at 9, the IVI Receivables were exhausted, and there were no further amounts

owed to IVI under the P-19 Contract. Furthermore, Petrobras could properly advise MAC to assert a claim under the MAC Payment Bond, instead of attempting to recover IVI's debt from Brasoil; such advice was clearly in Petrobras' economic interest.

64. Petrobras did not act wrongfully or with malice, or employ fraudulent or illegal means, in advising Brasoil and/or MAC regarding claims under the MAC Payment Bond and payments due from IVI to MAC.

65. Even assuming the Sureties are the subrogees of MAC, MAC has no claims against Petrobras under the Notice of Assignment, the Assignment of Receivables, or the MAC Payment Bond in connection with payments to MAC. Petrobras and Brasoil did not agree with IVI or the P-19 Consortium to make payments to MAC as part of a Consortia/IVI/Petrobras contract.

66. The Financed Equipment belonged to Brasoil under the P-19 Contract. (PB-279 at 209 § 3.23.) MAC decided independently not to accept the tender. IVI did not have a binding agreement with MAC for MAC to accept the tender of the equipment and Petrobras could not tortiously interfere with a non-existent agreement.

67. Petrobras did not prevent IVI from making the May 30, 1997 payment or unjustifiably interfere with IVI's efforts to do so. Petrobras had no obligation to allow Brasoil funds to be used to make the payment when no sums were owed to IVI. IVI could have used whatever funds it had to meet its commitment to MAC.

68. Petrobras and Brasoil did not enter into a comfort letter or other agreement guaranteeing to pay the obligations of IVI to MAC under the MAC Agreement or otherwise.

69. MAC has no claim for promissory estoppel and/or equitable estoppel against Petrobras and therefore the Sureties have no rights of subrogation for such a claim. "Under New York law, a promissory estoppel claim requires `a clear and unambiguous promise; a reasonable and foreseeable reliance by the party to whom the promise is made; and an injury sustained by the party asserting the estoppel by reason of his reliance.'" Frutico S.A. de C.V. v. Bankers Trust Co., 833 F. Supp. 288, 299 (S.D.N.Y. 1993) (quoting R.G. Group, Inc. v. Horn & Hardart Co., 751 F.2d 69, 78 (2d Cir. 1984)). MAC, a sophisticated company, made it clear that its decisions were its own and that it was not able to obtain any clear and unambiguous promise from Petrobras.

70. The elements of equitable estoppel are: (1) conduct which amounts to a false representation or concealment of material facts; (2) intention that such conduct will be acted upon by the other party; and (3) knowledge of the real facts. Int'l Minerals, 96 F.3d at 594. The evidence does not reveal any misrepresentations on the part of Petrobras with respect to MAC.

71. Petrobras did not convert any funds that were properly the funds of IVI or MAC.

72. Petrobras has no duty to reimburse the Sureties for any loss they suffered on the MAC Payment Bond.

73. Article 60 of Law 8.666 bars any claim that Brasoil or Petrobras entered into an oral agreement to replace the P-19 and P-31 Contracts. (Aragao Decl. at 11-26.) Article 60 provides that, with certain exceptions for small cash purchases, any oral contract shall be null and void. It is plain that the P-19 and P-31 Contracts were subject to public bidding in accordance with Public Law 8.666. Article 60 would therefore invalidate the various theories of the Sureties with respect to new, oral contracts, including their argument that Petrobras entered into a partnership agreement with the Consortia, even if the theories had any factual basis, which they do not.

74. The Sureties argue that the P-19 and P-31 Contracts, which resulted from a bidding process governed by Law 8.666, are governed not by that law, but by general private law applicable to mixed economy companies. Mr. Aragao's analysis of the Brazilian authorities is more persuasive and concludes that the contracts were in fact required to conform to Law 8.666. Any other result would seriously undermine the detailed provisions of Law 8.666 relating to the contracts that result from public bidding conducted by mixed economy companies. (Tr. at 4761-68.) In any event, the central difference between the parties is whether Article 60 of Law 8.666, in particular, governs in this case. Law 8.666 explicitly provides, in Article 62, that the provisions of Article 55 and Articles 58-61 shall apply wherever appropriate "to other contracts whose content is governed predominantly by the rule of private law." Thus, even if the Sureties were correct that private law should govern the Contracts generally, Article 60 would nevertheless invalidate the Sureties oral agreement theories. (Id. at 4767-68.)

75. The Sureties' allegation of a new Consortia/IVI/Petrobras Contract has no basis. There was no such agreement.

76. IVI, Sade, and IESA have no claims against Petrobras arising out of or related to the P-19 and P-31 Contracts. Consequently, the Sureties have no subrogation rights against Petrobras.

CONCLUSION

For the reasons explained above, Brasoil is entitled to recover from the Sureties the amount of \$90,600,000 with respect to the breach by the Sureties of their obligations under the P-19 Performance Bond. Brasoil is entitled to recover \$146,201,776 with respect to the breach by the Sureties of their obligations under the P-31 Bond. Brasoil is entitled to recover attorneys' fees and costs, but its total damages including such fees may not exceed the limits set in the bonds. Brasoil is also entitled to recover pre-judgment interest, as explained above. The Sureties are not entitled to any judgment declaring their obligations discharged. The Sureties are also not entitled to any indemnification from Petrobras for their obligations.

The parties are directed to submit proposed final judgments by August 9, 2002. Any objections to the proposed judgments may be submitted by August 16, 2002.

SO ORDERED.

Our website includes the main text of the court's opinion but does not include the docket number, case citation or footnotes. Upon purchase, docket numbers and/or citations allow you to research a case further or to use a case in a legal proceeding. Footnotes (if any) include details of the court's decision.